



SEQUENCE LISTING

<110> McGill University
Rouleau, Guy A.
Ragsdale, David
Cossette, Patrick
Rocherfort, Daniel
Lafreniere, Ronald G.

<120> LOCI FOR IDIOPATHIC GENERALIZED EPILEPSY, MUTATIONS THEREOF AND METHODS USING SAME TO ASSESS, DIAGNOSE, PROGNOSIS OR TREAT EPILEPSY

<130> GOUD:023US

<140> 09/718,355

<141> 2000-11-24

<150> 60/167,623

<151> 1999-11-26

<160> 408

<170> PatentIn version 3.2

<210> 1

<211> 8378

<212> DNA

<213> Homo sapiens

<400> 1

tactgcagag gtctctggtg catgtgtgta tgtgtgcggt tgtgtgtgtt tgtgtgtctg	60
tgtgtttctgc cccagtgaga ctgcagccct tgtaaatact ttgacacctt ttgcaagaag	120
gaatctgaac aattgcaact gaaggcacat tggtatcatc tcgtcttttg gtgatgctgt	180
tcctcactgc agatggataa ttttcctttt aatcaggaat ttcatatgca gaataaatgg	240
taattaaaat gtgcaggatg acaagatgga gcaaacagtg cttgtaccac caggacctga	300
cagcttcaac ttcttcacca gagaatctct tgcggctatt gaaagacgca ttgcagaaga	360
aaaggcaaag aatcccaaac cagacaaaaa agatgacgac gaaaatggcc caaagccaaa	420
tagtgacttg gaagctggaa agaaccttcc atttatttat ggagacattc ctccagagat	480
gggtgcagag cccctggagg acctggaccc ctactatata aataagaaaa cttttatagt	540
attgaataaa gggaaggcca tcttccggtt cagtgccacc tctgccctgt acattttaac	600
tcccttcaat cctcttagga aaatagctat taagattttg gtacattcat tattcagcat	660
gctaattatg tgcactatct tgacaaactg tgtgtttatg acaatgagta accctcctga	720
ttggacaaaag aatgtagaat acaccttcac aggaatatat acttttgaat cacttataaa	780

aattattgca aggggattct gtttagaaga ttttactttc cttcgggatc catggaactg	840
gctcgatttc actgtcatta catttgcgta cgtcacagag tttgtggacc tgggcaatgt	900
ctcggcattg agaacattca gagttctccg agcattgaag acgatttcag tcattccagg	960
cctgaaaacc atttgtgggag ccctgatcca gtctgtgaag aagctctcag atgtaatgat	1020
cctgactgtg ttctgtctga gcgtatttgc tctaattggg ctgcagctgt tcatgggcaa	1080
cctgaggaat aaatgtatac aatggcctcc caccaatgct tccttggagg aacatagtat	1140
agaaaagaat ataactgtga attataatgg tacacttata aatgaaactg tctttgagtt	1200
tgactggaag tcatatattc aagattcaag atatcattat ttcttggagg gttttttaga	1260
tgactacta tgtggaaata gctctgatgc aggccaatgt ccagagggat atatgtgtgt	1320
gaaagctggt agaaatccca attatggcta cacaagcttt gataccttca gttgggcttt	1380
tttgtccttg tttcgactaa tgactcagga cttctgggaa aatctttatc aactgacatt	1440
acgtgctgct gggaaaacgt acatgatatt ttttgtattg gtcattttct tgggctcatt	1500
ctacctaata aatttgatcc tggctgtggt ggccatggcc tacgaggaac agaatcaggc	1560
caccttgga gaagcagaac agaaagaggc cgaatttcag cagatgattg aacagcttaa	1620
aaagcaacag gaggcagctc agcaggcagc aacggcaact gcctcagaac attccagaga	1680
gccagtgca gcaggcaggc tctcagacag ctcatctgaa gcctctaagt tgagttccaa	1740
gagtgctaag gaaagaagaa atcggaggaa gaaaagaaaa cagaaagagc agtctggtgg	1800
ggaagagaaa gatgaggatg aattccaaaa atctgaatct gaggacagca tcaggaggaa	1860
aggttttcgc ttctccattg aagggaaccg attgacatat gaaaagaggc actcctcccc	1920
acaccagtct ttgttgagca tccgtggctc cctattttca ccaaggcgaa atagcagaac	1980
aagccttttc agcttttagag ggcgagcaaa ggatgtggga tctgagaacg acttcgcaga	2040
tgatgagcac agcaccttg aggataacga gagccgtaga gattccttgt ttgtgccccg	2100
acgacacgga gagagacgca acagcaacct gagtcagacc agtaggtcat cccggatgct	2160
ggcagtgttt ccagcgaatg ggaagatgca cagcactgtg gattgcaatg gtgtggtttc	2220
cttggttggg ggaccttcag ttcttacatc gcctgttgga cagcttctgc cagaggatgat	2280
aatagataag ccagctactg atgacaatgg aacaaccact gaaactgaaa tgagaaagag	2340
aaggtcaagt tctttccacg tttccatgga ctttctagaa gatccttccc aaaggcaacg	2400
agcaatgagt atagccagca ttctaacaaa tacagtagaa gaacttgaag aatccaggca	2460
gaaatgccca ccctgttggg ataaattttc caacatattc ttaatctggg actgttctcc	2520

atattgggta aaagtgaaac atgttggtcaa cctgggtgtg atggacccat ttgttgacct	2580
ggccatcacc atctgtattg tcttaaatac tcttttcatg gccatggagc actatccaat	2640
gacggaccat ttcaataatg tgcttacagt aggaaacttg gttttcactg ggatctttac	2700
agcagaaatg tttctgaaaa ttattgccat ggatccttac tattatttcc aagaaggctg	2760
gaatatcttt gacgggtttta ttgtgacgct tagcctggta gaacttggac tcgccaatgt	2820
ggaaggatta tctgttctcc gttcatttcg attgctgcga gttttcaagt tggcaaaatc	2880
ttggccaacg ttaaataatgc taataaagat catcggcaat tccgtggggg ctctgggaaa	2940
tttaaccctc gtcttggcca tcatcgtctt catttttgcc gtggtcggca tgcagctctt	3000
tggtaaaagc taaaagatt gtgtctgcaa gatcgccagt gattgtcaac tcccacgctg	3060
gcacatgaat gacttcttcc actccttcct gatttgttcc cgcgtgctgt gtggggagtg	3120
gatagagacc atgtgggact gtatggaggt tgctgggtcaa gccatgtgcc ttactgtctt	3180
catgatggtc atgggtgattg gaaacctagt ggtcctgaat ctctttctgg ccttgcttct	3240
gagctcattt agtgcagaca accttgacgc cactgatgat gataatgaaa tgaataatct	3300
ccaaattgct gtggatagga tgcacaaagg agtagcttat gtgaaaagaa aaatatatga	3360
atattattcaa cagtccttca ttaggaaaca aaagatttta gatgaaatta aaccacttga	3420
tgatctaaac aacaagaaag acagttgtat gtccaatcat acagcagaaa ttgggaaaga	3480
tcttgactat cttaaagatg taaatggaac tacaagtggg ataggaactg gcagcagtgt	3540
tgaaaaatac attattgatg aaagtgatta catgtcattc ataaacaacc ccagtcttac	3600
tgtgactgta ccaattgctg taggagaatc tgactttgaa aatttaaaca cggaagactt	3660
tagtagtgaa tcggatctgg aagaaagcaa agagaaactg aatgaaagca gtagctcatc	3720
agaaggtagc actgtggaca tcggcgccacc tgtagaagaa cagcccgtag tggaacctga	3780
agaaactctt gaaccagaag cttgtttcac tgaaggctgt gtacaaagat tcaagtgttg	3840
tcaaatacat gtggaagaag gcagaggaaa acaatgggtg aacctgagaa ggacgtgttt	3900
ccgaatagtt gaacataact ggtttgagac cttcattggt ttcattgattc tccttagtag	3960
tggtgctcgg catttgaaga tatatatatt gatcagcgaa agacgattaa gacgatgttg	4020
gaatatgctg acaaggtttt cacttacatt ttcattctgg aaatgcttct aaaatgggtg	4080
gcatatggct atcaaacata tttcaccaat gcctgggtgt ggctggactt cttaattggt	4140
gatgtttcat tggtcagttt aacagcaaat gccttgggtt actcagaact tggagccatc	4200

aaatctctca	ggacactaag	agctctgaga	cctctaagag	ccttatctcg	atttgaaggg	4260
atgaggggtgg	ttgtgaatgc	ccttttagga	gcaattccat	ccatcatgaa	tgtgcttctg	4320
gtttgtctta	tattctggct	aattttcagc	atcatgggcg	taaatttggt	tgctggcaaa	4380
ttctaccact	gtattaacac	cacaactggg	gacaggtttg	acatcgaaga	cgtgaataat	4440
catactgatt	gcctaaaact	aatagaaaga	aatgagactg	ctcgatggaa	aaatgtgaaa	4500
gtaaaactttg	ataatgtagg	atttgggtat	ctctctttgc	ttcaagttgc	cacattcaaa	4560
ggatggatgg	atataatgta	tgcagcagtt	gattccagaa	atgtggaact	ccagcctaag	4620
tatgaagaaa	gtctgtacat	gtatctttac	tttgttattt	tcatcatctt	tgggtccttc	4680
ttcaccttga	acctgtttat	tgggtgtcatc	atagataatt	tcaaccagca	gaaaaagaag	4740
tttgagggtc	aagacatctt	tatgacagaa	gaacagaaga	aatactataa	tgcaatgaaa	4800
aaattaggat	cgaaaaaacc	gcaaaagcct	atacctcgac	caggaaacaa	atttcaagga	4860
atgggtctttg	acttcgtaac	cagacaagtt	tttgacataa	gcatcatgat	tctcatctgt	4920
cttaacatgg	tcacaatgat	ggtggaaaca	gatgaccaga	gtgaatatgt	gactaccatt	4980
ttgtcacgca	tcaatctggt	gttcattgtg	ctatttactg	gagagtgtgt	actgaaactc	5040
atctctctac	gccattatta	ttttaccatt	ggatggaata	tttttgattt	tgtgggtgtc	5100
attctctcca	ttgtaggtat	gtttcttgcc	gagctgatag	aaaagtattt	cgtgtcccct	5160
accctgttcc	gagtgatccg	tcttgctagg	attggccgaa	tcctacgtct	gatcaaagga	5220
gcaaagggga	tccgcacgct	gctctttgct	ttgatgatgt	cccttcctgc	gttgtttaac	5280
atcggcctcc	tactcttcct	agtcatgttc	atctacgcca	tctttgggat	gtccaacttt	5340
gcctatgtta	agaggggaagt	tgggatcgat	gacatgttca	actttgagac	ctttggcaac	5400
agcatgatct	gcctattcca	aattacaacc	tctgctggct	gggatggatt	gctagcacc	5460
attctcaaca	gtaagccacc	cgactgtgac	cctaataaag	ttaaccctgg	aagctcagtt	5520
aaggagagact	gtgggaaccc	atctgttgga	attttctttt	ttgtcagtta	catcatcata	5580
tccttcctgg	ttgtggtgaa	catgtacatc	gcggtcatcc	tggagaactt	cagtgttgct	5640
actgaagaaa	gtgcagagcc	tctgagtgag	gatgactttg	agatgttcta	tgaggtttgg	5700
gagaagtttg	atcccgatgc	aactcagttc	atggaatttg	aaaaattatc	tcagtttgca	5760
gctgcgcttg	aaccgcctct	caatctgcca	caaccaaaca	aactccagct	cattgccatg	5820
gatttgccca	tggtgagtgg	tgaccggatc	cactgtcttg	atatcttatt	tgcttttaca	5880
aagcgggttc	taggagagag	tggagagatg	gatgctctac	gaatacagat	ggaagagcga	5940

ttcattggctt ccaatccttc caaggtctcc tatcagccaa tcactactac tttaaaacga	6000
aaacaagagg aagtatctgc tgtcattatt cagcgtgctt acagacgcca ccttttaaag	6060
cgaactgtaa aacaagcttc ctttacgtac aataaaaaaca aaatcaaagg tgggggcta	6120
cttcttataa aagaagacat gataattgac agaataaatg aaaactctat tacagaaaaa	6180
actgatctga ccatgtccac tgcagcttgt ccaccttcct atgaccgggt gacaaagcca	6240
attgtggaaa aacatgagca agaaggcaaa gatgaaaaag ccaaagggaa ataaatgaaa	6300
ataaataaaa ataattgggt gacaaattgt ttacagcctg tgaagggtgat gtatttttat	6360
caacaggact cctttaggag gtcaatgcca aactgactgt ttttacacaa atctccttaa	6420
ggtcagtgcc tacaataaga cagtgacccc ttgtcagcaa actgtgactc tgtgtaaagg	6480
ggagatgacc ttgacaggag gttactgttc tcactaccag ctgacactgc tgaagataag	6540
atgcacaatg gctagtcaga ctgtaggac cagtttcaag gggtgcaaac ctgtgatttt	6600
ggggttgttt aacatgaaac acttttagtgt agtaattgta tccactgttt gcatttcaac	6660
tgccacattt gtcacatttt tatggaatct gttagtggat tcactctttt gttaatccat	6720
gtgtttatta tatgtgacta tttttgtaaa cgaagtttct gttgagaaat aggctaagga	6780
cctctataac aggtatgcca cctgggggggt atggcaacca catggccctc ccagctacac	6840
aaagtcgtgg tttgcatgag ggcatgctgc acttagagat catgcatgag aaaaagtcac	6900
aagaaaaaca aattcttaaa tttcaccata tttctgggag gggtaattgg gtgataagt	6960
gaggtgcttt gttgatcttg ttttgcaaaa tccagcccct agaccaagta gattatttgt	7020
gggtaggcca gtaaatctta gcagggtgcaa acttcattca aatgtttgga gtcataaatg	7080
ttatgtttct tttgttgta ttaaaaaaaaa aacctgaata gtgaatattg cccctcacc	7140
tccaccgcca gaagactgaa ttgacaaaaa ttactcttta taaatttctg ctttttctg	7200
cactttgttt agccatcttc ggctctcagc aagggtgaca ctgtatatgt taatgaaatg	7260
ctatttatta tgtaaatagt ctttttacc tgtgggtgcac gtttgagcaa acaaataatg	7320
acctaagcac agtatttatt gcatcaaata tgtaccacaa gaaatgtaga gtgcaagctt	7380
tacacaggta ataaaatgta ttctgtacca tttatagata gtttggtatgc tatcaatgca	7440
tgtttatatt accatgctgc tgtatctggt ttctctcact gtcagaatc tcatttatga	7500
gaaaccatat gtcagtggta aagtcaagga aattgttcaa cagatctcat ttatttaagt	7560
cattaagcaa tagtttgag cactttaaca gctttttggt tattttttaca ttttaagtgg	7620

ataacatatg gtatatagcc agactgtaca gacatgttta aaaaaacaca ctgcttaacc	7680
tattaaatat gtgttttagaa ttttataagc aaatataaat actgtaaaaa gtcactttat	7740
tttatttttc agcattatgt acataaatat gaagaggaaa ttatcttcag gttgatatca	7800
caatcacttt tcttactttc tgtccatagt actttttcat gaaagaaatt tgctaaataa	7860
gacatgaaaa caagactggg tagttgtaga tttctgcttt ttaaattaca tttgctaatt	7920
ttagattatt tcacaatttt aaggagcaaa atagggttcac gattcatatc caaattatgc	7980
tttgcaattg gaaaagggtt taaaatttta tttatatattc tggtagtacc tgcactaact	8040
gaattgaagg tagtgcttat gttatttttg ttcttttttt ctgacttcgg tttatgtttt	8100
catttctttg gagtaatgct gctctagttg ttctaaatag aatgtgggct tcataatttt	8160
tttttccaca aaaacagagt agtcaactta tatagtcaat tacatcagga cattttgtgt	8220
ttcttacaga agcaaaccat aggctcctct tttccttaaa actacttaga taaactgtat	8280
tcgtgaactg catgctggaa aatgctacta ttatgctaaa taatgctaac caacatttaa	8340
aatgtgcaaa actaataaag attacatttt ttatttta	8378

<210> 2
 <211> 8378
 <212> DNA
 <213> Homo sapiens

<400> 2	
tactgcagag gtctctggtg catgtgtgta tgtgtgcggt tgtgtgtgtt tgtgtgtctg	60
tgtgttctgc cccagtgaga ctgcagccct tgtaaatact ttgacacctt ttgcaagaag	120
gaatctgaac aattgcaact gaaggcacat tgttatcatc tcgtctttgg gtgatgctgt	180
tcctcactgc agatggataa ttttcctttt aatcaggaat ttcatatgca gaataaatgg	240
taattaaaat gtgcaggatg acaagatgga gcaaacagtg cttgtaccac caggacctga	300
cagcttcaac ttcttcacca gagaatctct tgcggctatt gaaagacgca ttgcagaaga	360
aaaggcaaag aatcccaaac cagacaaaaa agatgacgac gaaaatggcc caaagccaaa	420
tagtgacttg gaagctggaa agaaccttcc atttatttat ggagacattc ctccagagat	480
gggtgcagag cccctggagg acctggacct ctactatatc aataagaaaa cttttatagt	540
attgaataaa gggaaggcca tcttcgggtt cagtgccacc tctgcctgt acattttaac	600
tcccttcaat cctcttagga aaatagctat taagattttg gtacattcat tattcagcat	660
gctaattatg tgcactattt tgacaaactg tgtgtttatg acaatgagta accctcctga	720

ttggacaaaag aatgtagaat acaccttcac aggaatatat acttttgaat cacttataaa	780
aattattgca aggggattct gtttagaaga ttttactttc cttcgggatc catggaactg	840
gctcgatttc actgtcatta catttgcggt tgtaacagaa tttgtaaacc taggcaattt	900
ttcagctctt cgcactttca gagtcttgag agctttgaaa actatttcgg taattccagg	960
cctgaaaacc attgtgggag ccctgatcca gtctgtgaag aagctctcag atgtaatgat	1020
cctgactgtg ttctgtctga gcgtatttgc tctaattggg ctgcagctgt tcatgggcaa	1080
cctgaggaat aaatgtatac aatggcctcc caccaatgct tccttgaggg aacatagtat	1140
agaaaagaat ataactgtga attataatgg tacacttata aatgaaactg tctttgagtt	1200
tgactggaag tcatatattc aagattcaag atatcattat ttccctggagg gttttttaga	1260
tgactacta tgtggaaata gctctgatgc aggccaatgt ccagagggat atatgtgtgt	1320
gaaagctggg agaaatccca attatggcta cacaagcttt gataccttca gttgggcttt	1380
tttgtccttg tttcgactaa tgactcagga cttctgggaa aatctttatc aactgacatt	1440
acgtgctgct gggaaaacgt acatgatatt ttttgtattg gtcattttct tgggctcatt	1500
ctacctaata aatttgatcc tggctgtggg ggccatggcc tacgaggaac agaatcaggc	1560
caccttgga gaagcagaac agaaagaggc cgaatttcag cagatgattg aacagcttaa	1620
aaagcaacag gaggcagctc agcaggcagc aacggcaact gcctcagaac attccagaga	1680
gcccagtgc gcaggcaggc tctcagacag ctcatctgaa gcctctaagt tgagttccaa	1740
gagtgctaag gaaagaagaa atcggaggaa gaaaagaaaa cagaaagagc agtctgggtg	1800
ggaagagaaa gatgaggatg aattccaaaa atctgaatct gaggacagca tcaggaggaa	1860
aggttttcgc ttctccattg aagggaaccg attgacatat gaaaagaggc actcctcccc	1920
acaccagtct ttgttgagca tccgtggctc cctattttca ccaaggcgaa atagcagaac	1980
aagccttttc agcttttagag ggcgagcaaa ggatgtggga tctgagaacg acttcgcaga	2040
tgatgagcca gcacctttga ggataacgag agccgtagag attccttggt tgtgccccga	2100
cgacacggag agagacgcaa cagcaacctg agtcagacca gtaggtcatc ccggatgctg	2160
gcagtgtttc cagcgaatgg gaagatgcac agcactgtgg attgcaatgg tgtgggtttcc	2220
ttgggttggtg gaccttcagt tcctacatcg cctgttggac agcttctgcc agaggtgata	2280
atagataagc cagctactga tgacaatgga acaaccactg aaactgaaat gagaaagaga	2340
aggtcaagtt ctttccacgt ttccatggac tttctagaag atccttccca aaggcaacga	2400
gcaatgagta tagccagcat tctaacaaat acagtagaag aacttgaaga atccaggcag	2460

aaatgcccac	cctgttggtgta	taaattttcc	aacatattct	taatctggga	ctgttctcca	2520
tattggttaa	aagtgaaaca	tggtgtcaac	ctggttgtga	tggaccatt	tggtgacctg	2580
gccatcacca	tctgtattgt	cttaaatact	cttttcatgg	ccatggagca	ctatccaatg	2640
acggaccatt	tcaataatgt	gcttacagta	ggaaacttgg	ttttcactgg	gatctttaca	2700
gcagaaatgt	ttctgaaaat	tattgccatg	gaccttact	attatttcca	agaaggctgg	2760
aatatctttg	acggttttat	tgtgacgctt	agcctggtag	aacttggact	cgccaatgtg	2820
gaaggattat	ctgttctccg	ttcatttcga	ttgctgcgag	ttttcaagtt	ggcaaaatct	2880
tggccaacgt	taaatatgct	aataaagatc	atcggaatt	ccgtgggggc	tctgggaaat	2940
ttaaccctcg	tcttgccat	catcgtcttc	atttttgccg	tggtcggcat	gcagctcttt	3000
ggtaaaagct	acaaagattg	tgtctgcaag	atcgccagtg	attgtcaact	cccacgctgg	3060
cacatgaatg	acttcttcca	ctccttctg	attgtgttcc	gcgtgctgtg	tggggagtgg	3120
atagagacca	tgtgggactg	tatggaggtt	gctggcgaag	ccatgtgcct	tactgtcttc	3180
atgatggtca	tgggtgattg	aaacctagt	gtcctgaatc	tctttctggc	cttgcttctg	3240
agctcattta	gtgcagacaa	ccttgagcc	actgatgatg	ataatgaaat	gaataatctc	3300
caaattgctg	tggataggat	gcacaaagga	gtagcttatg	tgaaaagaaa	aatatatgaa	3360
tttattcaac	agtccttcat	taggaaacaa	aagatttttag	atgaaattaa	accacttgat	3420
gatctaaaca	acaagaaaga	cagttgtatg	tccaatcata	cagcagaaat	tgggaaagat	3480
cttgactatc	ttaaagatgt	aaatggaact	acaagtggta	taggaactgg	cagcagtgtt	3540
gaaaaataca	ttattgatga	aagtgattac	atgtcattca	taaacaaccc	cagtcttact	3600
gtgactgtac	caattgctgt	aggagaatct	gactttgaaa	atttaaacac	ggaagacttt	3660
agtagtgaat	cggatctgga	agaaagcaaa	gagaaactga	atgaaagcag	tagctcatca	3720
gaaggtagca	ctgtggacat	cggcgcacct	gtagaagaac	agcccgtagt	ggaacctgaa	3780
gaaactcttg	aaccagaagc	ttgtttcact	gaaggctgtg	tacaaagatt	caagtgttgt	3840
caaatcaatg	tggaagaagg	cagaggaaaa	caatggtgga	acctgagaag	gacgtgtttc	3900
cgaatagttg	aacataactg	gtttgagacc	ttcattgttt	tcatgattct	ccttagtagt	3960
ggtgctctgg	catttgaaga	tatatatatt	gatcagcgaa	agacgattaa	gacgatgttg	4020
gaatatgctg	acaaggtttt	cacttacatt	ttcattctgg	aaatgcttct	aaaatgggtg	4080
gcatatggct	atcaaaatat	ttaccaatg	cctgggtgtg	gctggacttc	ttaattgttg	4140

atgttttcatt ggtcagttta acagcaaagt ccttgggtta ctcagaactt ggagccatca	4200
aatctctcag gacactaaga gctctgagac ctctaagagc cttatctcga tttgaagggg	4260
tgaggggtgt tgtgaatgcc cttttaggag caattccatc catcatgaat gtgcttctgg	4320
tttgtcttat attctggcta attttcagca tcatgggcgt aaatttggtt gctggcaa	4380
tctaccactg tattaacacc acaactgggt acagggttga catcgaagac gtgaataatc	4440
atactgattg cctaaaaacta atagaaagaa atgagactgc tcgatggaaa aatgtgaaag	4500
taaactttga taatgtagga tttgggtatc tctctttgct tcaagttgcc acattcaaag	4560
gatggatgga tataatgtat gcagcagttg attccagaaa tgtggaactc cagcctaagt	4620
atgaagaaag tctgtacatg tatctttact ttgttatttt catcatcttt gggtccttct	4680
tcaccttgaa cctgtttatt ggtgtcatca tagataattt caaccagcag aaaaagaagt	4740
ttggaggtca agacatcttt atgacagaag aacagaagaa atactataat gcaatgaaaa	4800
aattaggatc gaaaaaaccc caaaagccta tacctcgacc aggaaacaaa tttcaaggaa	4860
tggtctttga cttcgtaacc agacaagttt ttgacataag catcatgatt ctcatctgtc	4920
ttaacatggt cacaatgatg gtggaaacag atgaccagag tgaatatgtg actaccattt	4980
tgtcacgcat caatctgggt ttcattgtgc tatttactgg agagtgtgta ctgaaactca	5040
tctctctacg ccattattat tttaccattg gatggaatat ttttgatttt gtggttgta	5100
ttctctccat ttaggtatg tttcttgccg agctgataga aaagtatttc gtgtccccta	5160
ccctgttccg agtgatccgt cttgctagga ttggccgaat cctacgtctg atcaaaggag	5220
caaaggggat ccgcacgctg ctctttgctt tgatgatgtc ccttcctgctg ttgtttaaca	5280
tcggcctcct actcttccta gtcattgtca tctacgccat ctttgggatg tccaactttg	5340
cctatgttaa gagggaagtt gggatcgatg acatgttcaa ctttgagacc tttggcaaca	5400
gcatgatctg cctattccaa attacaacct ctgctggctg ggatggattg ctagcaccca	5460
ttctcaacag taagccaccc gactgtgacc ctaataaagt taaccctgga agctcagtta	5520
agggagactg tgggaaccca tctgttgga ttttcttttt tgtcagttac atcatcatat	5580
ccttcctgggt tgtggtgaac atgtacatcg cggtcacctt ggagaacttc agtgttgcta	5640
ctgaagaaag tgcagagcct ctgagtgagg atgactttga gatgttctat gaggtttggg	5700
agaagtttga tcccgatgca actcagttca tggaatttga aaaattatct cagtttgcag	5760
ctgcgcttga accgcctctc aatctgccac aaccaacaaa actccagctc attgccatgg	5820
atttgcccat ggtgagtggt gaccggatcc actgtcttga tatcttattt gcttttacia	5880

agcgggttct	aggagagagt	ggagagatgg	atgctctacg	aatacagatg	gaagagcgat	5940
tcatggcttc	caatccttcc	aaggtctcct	atcagccaat	cactactact	ttaaaacgaa	6000
aacaagagga	agtatctgct	gtcattattc	agcgtgctta	cagacgccac	cttttaaagc	6060
gaactgtaaa	acaagcttcc	tttacgtaca	ataaaaacaa	aatcaaagggt	ggggctaatc	6120
ttcttataaa	agaagacatg	ataattgaca	gaataaatga	aaactctatt	acagaaaaaa	6180
ctgatctgac	catgtccact	gcagcttgtc	caccttccta	tgaccgggtg	acaaagccaa	6240
ttgtggaaaa	acatgagcaa	gaaggcaaag	atgaaaaagc	caaagggaaa	taaatgaaaa	6300
taaataaaaa	taattgggtg	acaaattggt	tacagcctgt	gaagggtgatg	tatTTTTatc	6360
aacaggactc	ctttaggagg	tcaatgccaa	actgactggt	tttacacaaa	tctccttaag	6420
gtcagtgcct	acaataagac	agtgaccctt	tgtcagcaaa	ctgtgactct	gtgtaaaggg	6480
gagatgacct	tgacaggagg	ttactgttct	cactaccagc	tgacactgct	gaagataaga	6540
tgcacaatgg	ctagtcagac	tgtagggacc	agtttcaagg	ggtgcaaacc	tgtgattttg	6600
gggttgttta	acatgaaaca	ctttagtgtg	gtaattgtat	ccactgtttg	catttcaact	6660
gccacatttg	tcacattttt	atggaatctg	ttagtggatt	catctttttg	ttaatccatg	6720
tgtttattat	atgtgactat	ttttgtaaac	gaagtttctg	ttgagaaata	ggctaaggac	6780
ctctataaca	ggtatgccac	ctggggggta	tggcaaccac	atggccctcc	cagctacaca	6840
aagtcgtggt	ttgcatgagg	gcatgctgca	cttagagatc	atgcatgaga	aaaagtcaca	6900
agaaaaacaa	attctttaat	ttcaccatat	ttctgggagg	ggtaattggg	tgataagtgg	6960
aggtgctttg	ttgatcttgt	tttgcgaaat	ccagccccta	gaccaagtag	attatttgtg	7020
ggtaggccag	taaatcttag	caggtgcaaa	cttcattcaa	atgtttggag	tcataaatgt	7080
tatgtttctt	tttgttgtat	taaaaaaaaa	acctgaatag	tgaatattgc	ccctcacctt	7140
ccaccgccag	aagactgaat	tgaccaaaat	tactctttat	aaatttctgc	tttttctgc	7200
actttgttta	gccatcttcg	gctctcagca	aggttgacac	tgtatatgtt	aatgaaatgc	7260
tattttattat	gtaaatagtc	attttaccct	gtggtgcacg	tttgagcaaa	caaataatga	7320
cctaagcaca	gtatttattg	catcaaatat	gtaccacaag	aaatgtagag	tgcaagcttt	7380
acacaggtaa	taaaatgtat	tctgtaccat	ttatagatag	tttggatgct	atcaatgcat	7440
gttttatatta	ccatgctgct	gtatctgggt	tctctcactg	ctcagaatct	catttatgag	7500
aaaccatatg	tcagtggtaa	agtcaaggaa	attgttcaac	agatctcatt	tatttaagtc	7560

attaagcaat agtttgcagc actttaacag ctttttggtt atttttacat tttaagtgga	7620
taacatatgg tatatagcca gactgtacag acatgtttaa aaaaacacac tgcttaacct	7680
attaaatatg tgtttagaat ttataagca aatataaata ctgtaaaaag tcactttatt	7740
ttatTTTTca gcattatgta cataaatatg aagaggaaat tatcttcagg ttgatatcac	7800
aatcactttt cttactttct gtccatagta ctttttcatg aaagaaattt gctaaataag	7860
acatgaaaac aagactgggt agttgtagat ttctgctttt taaattacat ttgctaattt	7920
tagattattt cacaatttta aggagcaaaa taggttcacg attcatatcc aaattatgct	7980
ttgcaattgg aaaagggttt aaaattttat ttatatttct ggtagtacct gcactaactg	8040
aattgaagggt agtgcttatg ttatTTTTgt tcttttttct tgacttcggt ttatgttttc	8100
atttctttgg agtaatgctg ctctagattg ttctaaatag aatgtgggct tcataatttt	8160
ttttccaca aaaacagagt agtcaactta tatagtcaat tacatcagga cattttgtgt	8220
ttcttacaga agcaaaccat aggtcctct tttccttaaa actacttaga taaactgtat	8280
tcgtgaactg catgctggaa aatgctacta ttatgctaaa taatgctaac caacatttaa	8340
aatgtgcaaa actaataaag attacatttt ttatttta	8378

<210> 3
 <211> 2009
 <212> PRT
 <213> Homo sapiens

<400> 3

Met	Glu	Gln	Thr	Val	Leu	Val	Pro	Pro	Gly	Pro	Asp	Ser	Phe	Asn	Phe
1				5					10					15	

Phe	Thr	Arg	Glu	Ser	Leu	Ala	Ala	Ile	Glu	Arg	Arg	Ile	Ala	Glu	Glu
			20					25					30		

Lys	Ala	Lys	Asn	Pro	Lys	Pro	Asp	Lys	Lys	Asp	Asp	Asp	Glu	Asn	Gly
		35					40					45			

Pro	Lys	Pro	Asn	Ser	Asp	Leu	Glu	Ala	Gly	Lys	Asn	Leu	Pro	Phe	Ile
	50					55					60				

Tyr	Gly	Asp	Ile	Pro	Pro	Glu	Met	Val	Ser	Glu	Pro	Leu	Glu	Asp	Leu
65						70				75				80	

Asp	Pro	Tyr	Tyr	Ile	Asn	Lys	Lys	Thr	Phe	Ile	Val	Leu	Asn	Lys	Gly
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

85

90

95

Lys Ala Ile Phe Arg Phe Ser Ala Thr Ser Ala Leu Tyr Ile Leu Thr
 100 105 110

Pro Phe Asn Pro Leu Arg Lys Ile Ala Ile Lys Ile Leu Val His Ser
 115 120 125

Leu Phe Ser Met Leu Ile Met Cys Thr Ile Leu Thr Asn Cys Val Phe
 130 135 140

Met Thr Met Ser Asn Pro Pro Asp Trp Thr Lys Asn Val Glu Tyr Thr
 145 150 155 160

Phe Thr Gly Ile Tyr Thr Phe Glu Ser Leu Ile Lys Ile Ile Ala Arg
 165 170 175

Gly Phe Cys Leu Glu Asp Phe Thr Phe Leu Arg Asp Pro Trp Asn Trp
 180 185 190

Leu Asp Phe Thr Val Ile Thr Phe Ala Tyr Val Thr Glu Phe Val Asp
 195 200 205

Leu Gly Asn Val Ser Ala Leu Arg Thr Phe Arg Val Leu Arg Ala Leu
 210 215 220

Lys Thr Ile Ser Val Ile Pro Gly Leu Lys Thr Ile Val Gly Ala Leu
 225 230 235 240

Ile Gln Ser Val Lys Lys Leu Ser Asp Val Met Ile Leu Thr Val Phe
 245 250 255

Cys Leu Ser Val Phe Ala Leu Ile Gly Leu Gln Leu Phe Met Gly Asn
 260 265 270

Leu Arg Asn Lys Cys Ile Gln Trp Pro Pro Thr Asn Ala Ser Leu Glu
 275 280 285

Glu His Ser Ile Glu Lys Asn Ile Thr Val Asn Tyr Asn Gly Thr Leu
 290 295 300

Ile Asn Glu Thr Val Phe Glu Phe Asp Trp Lys Ser Tyr Ile Gln Asp
 305 310 315 320

Ser Arg Tyr His Tyr Phe Leu Glu Gly Phe Leu Asp Ala Leu Leu Cys
325 330 335

Gly Asn Ser Ser Asp Ala Gly Gln Cys Pro Glu Gly Tyr Met Cys Val
340 345 350

Lys Ala Gly Arg Asn Pro Asn Tyr Gly Tyr Thr Ser Phe Asp Thr Phe
355 360 365

Ser Trp Ala Phe Leu Ser Leu Phe Arg Leu Met Thr Gln Asp Phe Trp
370 375 380

Glu Asn Leu Tyr Gln Leu Thr Leu Arg Ala Ala Gly Lys Thr Tyr Met
385 390 395 400

Ile Phe Phe Val Leu Val Ile Phe Leu Gly Ser Phe Tyr Leu Ile Asn
405 410 415

Leu Ile Leu Ala Val Val Ala Met Ala Tyr Glu Glu Gln Asn Gln Ala
420 425 430

Thr Leu Glu Glu Ala Glu Gln Lys Glu Ala Glu Phe Gln Gln Met Ile
435 440 445

Glu Gln Leu Lys Lys Gln Gln Glu Ala Ala Gln Gln Ala Ala Thr Ala
450 455 460

Thr Ala Ser Glu His Ser Arg Glu Pro Ser Ala Ala Gly Arg Leu Ser
465 470 475 480

Asp Ser Ser Ser Glu Ala Ser Lys Leu Ser Ser Lys Ser Ala Lys Glu
485 490 495

Arg Arg Asn Arg Arg Lys Lys Arg Lys Gln Lys Glu Gln Ser Gly Gly
500 505 510

Glu Glu Lys Asp Glu Asp Glu Phe Gln Lys Ser Glu Ser Glu Asp Ser
515 520 525

Ile Arg Arg Lys Gly Phe Arg Phe Ser Ile Glu Gly Asn Arg Leu Thr
530 535 540

Tyr Glu Lys Arg Tyr Ser Ser Pro His Gln Ser Leu Leu Ser Ile Arg
545 550 555 560

Gly Ser Leu Phe Ser Pro Arg Arg Asn Ser Arg Thr Ser Leu Phe Ser
565 570 575

Phe Arg Gly Arg Ala Lys Asp Val Gly Ser Glu Asn Asp Phe Ala Asp
580 585 590

Asp Glu His Ser Thr Phe Glu Asp Asn Glu Ser Arg Arg Asp Ser Leu
595 600 605

Phe Val Pro Arg Arg His Gly Glu Arg Arg Asn Ser Asn Leu Ser Gln
610 615 620

Thr Ser Arg Ser Ser Arg Met Leu Ala Val Phe Pro Ala Asn Gly Lys
625 630 635 640

Met His Ser Thr Val Asp Cys Asn Gly Val Val Ser Leu Val Gly Gly
645 650 655

Pro Ser Val Pro Thr Ser Pro Val Gly Gln Leu Leu Pro Glu Val Ile
660 665 670

Ile Asp Lys Pro Ala Thr Asp Asp Asn Gly Thr Thr Thr Glu Thr Glu
675 680 685

Met Arg Lys Arg Arg Ser Ser Ser Phe His Val Ser Met Asp Phe Leu
690 695 700

Glu Asp Pro Ser Gln Arg Gln Arg Ala Met Ser Ile Ala Ser Ile Leu
705 710 715 720

Thr Asn Thr Val Glu Glu Leu Glu Glu Ser Arg Gln Lys Cys Pro Pro
725 730 735

Cys Trp Tyr Lys Phe Ser Asn Ile Phe Leu Ile Trp Asp Cys Ser Pro
740 745 750

Tyr Trp Leu Lys Val Lys His Val Val Asn Leu Val Val Met Asp Pro
755 760 765

Phe Val Asp Leu Ala Ile Thr Ile Cys Ile Val Leu Asn Thr Leu Phe
770 775 780

Met Ala Met Glu His Tyr Pro Met Thr Asp His Phe Asn Asn Val Leu
785 790 795 800

Thr Val Gly Asn Leu Val Phe Thr Gly Ile Phe Thr Ala Glu Met Phe
805 810 815

Leu Lys Ile Ile Ala Met Asp Pro Tyr Tyr Tyr Phe Gln Glu Gly Trp
820 825 830

Asn Ile Phe Asp Gly Phe Ile Val Thr Leu Ser Leu Val Glu Leu Gly
835 840 845

Leu Ala Asn Val Glu Gly Leu Ser Val Leu Arg Ser Phe Arg Leu Leu
850 855 860

Arg Val Phe Lys Leu Ala Lys Ser Trp Pro Thr Leu Asn Met Leu Ile
865 870 875 880

Lys Ile Ile Gly Asn Ser Val Gly Ala Leu Gly Asn Leu Thr Leu Val
885 890 895

Leu Ala Ile Ile Val Phe Ile Phe Ala Val Val Gly Met Gln Leu Phe
900 905 910

Gly Lys Ser Tyr Lys Asp Cys Val Cys Lys Ile Ala Ser Asp Cys Gln
915 920 925

Leu Pro Arg Trp His Met Asn Asp Phe Phe His Ser Phe Leu Ile Val
930 935 940

Phe Arg Val Leu Cys Gly Glu Trp Ile Glu Thr Met Trp Asp Cys Met
945 950 955 960

Glu Val Ala Gly Gln Ala Met Cys Leu Thr Val Phe Met Met Val Met
965 970 975

Val Ile Gly Asn Leu Val Val Leu Asn Leu Phe Leu Ala Leu Leu Leu
980 985 990

Ser Ser Phe Ser Ala Asp Asn Leu Ala Ala Thr Asp Asp Asp Asn Glu

995

1000

1005

Met	Asn	Asn	Leu	Gln	Ile	Ala	Val	Asp	Arg	Met	His	Lys	Gly	Val
1010						1015					1020			

Ala	Tyr	Val	Lys	Arg	Lys	Ile	Tyr	Glu	Phe	Ile	Gln	Gln	Ser	Phe
1025						1030					1035			

Ile	Arg	Lys	Gln	Lys	Ile	Leu	Asp	Glu	Ile	Lys	Pro	Leu	Asp	Asp
1040						1045					1050			

Leu	Asn	Asn	Lys	Lys	Asp	Ser	Cys	Met	Ser	Asn	His	Thr	Ala	Glu
1055						1060					1065			

Ile	Gly	Lys	Asp	Leu	Asp	Tyr	Leu	Lys	Asp	Val	Asn	Gly	Thr	Thr
1070						1075					1080			

Ser	Gly	Ile	Gly	Thr	Gly	Ser	Ser	Val	Glu	Lys	Tyr	Ile	Ile	Asp
1085						1090					1095			

Glu	Ser	Asp	Tyr	Met	Ser	Phe	Ile	Asn	Asn	Pro	Ser	Leu	Thr	Val
1100						1105					1110			

Thr	Val	Pro	Ile	Ala	Val	Gly	Glu	Ser	Asp	Phe	Glu	Asn	Leu	Asn
1115						1120					1125			

Thr	Glu	Asp	Phe	Ser	Ser	Glu	Ser	Asp	Leu	Glu	Glu	Ser	Lys	Glu
1130						1135					1140			

Lys	Leu	Asn	Glu	Ser	Ser	Ser	Ser	Ser	Glu	Gly	Ser	Thr	Val	Asp
1145						1150					1155			

Ile	Gly	Ala	Pro	Val	Glu	Glu	Gln	Pro	Val	Val	Glu	Pro	Glu	Glu
1160						1165					1170			

Thr	Leu	Glu	Pro	Glu	Ala	Cys	Phe	Thr	Glu	Gly	Cys	Val	Gln	Arg
1175						1180					1185			

Phe	Lys	Cys	Cys	Gln	Ile	Asn	Val	Glu	Glu	Gly	Arg	Gly	Lys	Gln
1190						1195					1200			

Trp	Trp	Asn	Leu	Arg	Arg	Thr	Cys	Phe	Arg	Ile	Val	Glu	His	Asn
1205						1210					1215			

Trp Phe Glu Thr Phe Ile Val Phe Met Ile Leu Leu Ser Ser Gly
1220 1225 1230

Ala Leu Ala Phe Glu Asp Ile Tyr Ile Asp Gln Arg Lys Thr Ile
1235 1240 1245

Lys Thr Met Leu Glu Tyr Ala Asp Lys Val Phe Thr Tyr Ile Phe
1250 1255 1260

Ile Leu Glu Met Leu Leu Lys Trp Val Ala Tyr Gly Tyr Gln Thr
1265 1270 1275

Tyr Phe Thr Asn Ala Trp Cys Trp Leu Asp Phe Leu Ile Val Asp
1280 1285 1290

Val Ser Leu Val Ser Leu Thr Ala Asn Ala Leu Gly Tyr Ser Glu
1295 1300 1305

Leu Gly Ala Ile Lys Ser Leu Arg Thr Leu Arg Ala Leu Arg Pro
1310 1315 1320

Leu Arg Ala Leu Ser Arg Phe Glu Gly Met Arg Val Val Val Asn
1325 1330 1335

Ala Leu Leu Gly Ala Ile Pro Ser Ile Met Asn Val Leu Leu Val
1340 1345 1350

Cys Leu Ile Phe Trp Leu Ile Phe Ser Ile Met Gly Val Asn Leu
1355 1360 1365

Phe Ala Gly Lys Phe Tyr His Cys Ile Asn Thr Thr Thr Gly Asp
1370 1375 1380

Arg Phe Asp Ile Glu Asp Val Asn Asn His Thr Asp Cys Leu Lys
1385 1390 1395

Leu Ile Glu Arg Asn Glu Thr Ala Arg Trp Lys Asn Val Lys Val
1400 1405 1410

Asn Phe Asp Asn Val Gly Phe Gly Tyr Leu Ser Leu Leu Gln Val
1415 1420 1425

Ala Thr Phe Lys Gly Trp Met Asp Ile Met Tyr Ala Ala Val Asp
1430 1435 1440

Ser Arg Asn Val Glu Leu Gln Pro Lys Tyr Glu Glu Ser Leu Tyr
1445 1450 1455

Met Tyr Leu Tyr Phe Val Ile Phe Ile Ile Phe Gly Ser Phe Phe
1460 1465 1470

Thr Leu Asn Leu Phe Ile Gly Val Ile Ile Asp Asn Phe Asn Gln
1475 1480 1485

Gln Lys Lys Lys Phe Gly Gly Gln Asp Ile Phe Met Thr Glu Glu
1490 1495 1500

Gln Lys Lys Tyr Tyr Asn Ala Met Lys Lys Leu Gly Ser Lys Lys
1505 1510 1515

Pro Gln Lys Pro Ile Pro Arg Pro Gly Asn Lys Phe Gln Gly Met
1520 1525 1530

Val Phe Asp Phe Val Thr Arg Gln Val Phe Asp Ile Ser Ile Met
1535 1540 1545

Ile Leu Ile Cys Leu Asn Met Val Thr Met Met Val Glu Thr Asp
1550 1555 1560

Asp Gln Ser Glu Tyr Val Thr Thr Ile Leu Ser Arg Ile Asn Leu
1565 1570 1575

Val Phe Ile Val Leu Phe Thr Gly Glu Cys Val Leu Lys Leu Ile
1580 1585 1590

Ser Leu Arg His Tyr Tyr Phe Thr Ile Gly Trp Asn Ile Phe Asp
1595 1600 1605

Phe Val Val Val Ile Leu Ser Ile Val Gly Met Phe Leu Ala Glu
1610 1615 1620

Leu Ile Glu Lys Tyr Phe Val Ser Pro Thr Leu Phe Arg Val Ile
1625 1630 1635

Arg Leu Ala Arg Ile Gly Arg Ile Leu Arg Leu Ile Lys Gly Ala
1640 1645 1650

Lys Gly Ile Arg Thr Leu Leu Phe Ala Leu Met Met Ser Leu Pro
1655 1660 1665

Ala Leu Phe Asn Ile Gly Leu Leu Leu Phe Leu Val Met Phe Ile
1670 1675 1680

Tyr Ala Ile Phe Gly Met Ser Asn Phe Ala Tyr Val Lys Arg Glu
1685 1690 1695

Val Gly Ile Asp Asp Met Phe Asn Phe Glu Thr Phe Gly Asn Ser
1700 1705 1710

Met Ile Cys Leu Phe Gln Ile Thr Thr Ser Ala Gly Trp Asp Gly
1715 1720 1725

Leu Leu Ala Pro Ile Leu Asn Ser Lys Pro Pro Asp Cys Asp Pro
1730 1735 1740

Asn Lys Val Asn Pro Gly Ser Ser Val Lys Gly Asp Cys Gly Asn
1745 1750 1755

Pro Ser Val Gly Ile Phe Phe Phe Val Ser Tyr Ile Ile Ile Ser
1760 1765 1770

Phe Leu Val Val Val Asn Met Tyr Ile Ala Val Ile Leu Glu Asn
1775 1780 1785

Phe Ser Val Ala Thr Glu Glu Ser Ala Glu Pro Leu Ser Glu Asp
1790 1795 1800

Asp Phe Glu Met Phe Tyr Glu Val Trp Glu Lys Phe Asp Pro Asp
1805 1810 1815

Ala Thr Gln Phe Met Glu Phe Glu Lys Leu Ser Gln Phe Ala Ala
1820 1825 1830

Ala Leu Glu Pro Pro Leu Asn Leu Pro Gln Pro Asn Lys Leu Gln
1835 1840 1845

Leu Ile Ala Met Asp Leu Pro Met Val Ser Gly Asp Arg Ile His

Lys Ala Lys Asn Pro Lys Pro Asp Lys Lys Asp Asp Asp Glu Asn Gly
35 40 45

Pro Lys Pro Asn Ser Asp Leu Glu Ala Gly Lys Asn Leu Pro Phe Ile
50 55 60

Tyr Gly Asp Ile Pro Pro Glu Met Val Ser Glu Pro Leu Glu Asp Leu
65 70 75 80

Asp Pro Tyr Tyr Ile Asn Lys Lys Thr Phe Ile Val Leu Asn Lys Gly
85 90 95

Lys Ala Ile Phe Arg Phe Ser Ala Thr Ser Ala Leu Tyr Ile Leu Thr
100 105 110

Pro Phe Asn Pro Leu Arg Lys Ile Ala Ile Lys Ile Leu Val His Ser
115 120 125

Leu Phe Ser Met Leu Ile Met Cys Thr Ile Leu Thr Asn Cys Val Phe
130 135 140

Met Thr Met Ser Asn Pro Pro Asp Trp Thr Lys Asn Val Glu Tyr Thr
145 150 155 160

Phe Thr Gly Ile Tyr Thr Phe Glu Ser Leu Ile Lys Ile Ile Ala Arg
165 170 175

Gly Phe Cys Leu Glu Asp Phe Thr Phe Leu Arg Asp Pro Trp Asn Trp
180 185 190

Leu Asp Phe Thr Val Ile Thr Phe Ala Phe Val Thr Glu Phe Val Asn
195 200 205

Leu Gly Asn Phe Ser Ala Leu Arg Thr Phe Arg Val Leu Arg Ala Leu
210 215 220

Lys Thr Ile Ser Val Ile Pro Gly Leu Lys Thr Ile Val Gly Ala Leu
225 230 235 240

Ile Gln Ser Val Lys Lys Leu Ser Asp Val Met Ile Leu Thr Val Phe
245 250 255

Cys Leu Ser Val Phe Ala Leu Ile Gly Leu Gln Leu Phe Met Gly Asn
260 265 270

Leu Arg Asn Lys Cys Ile Gln Trp Pro Pro Thr Asn Ala Ser Leu Glu
275 280 285

Glu His Ser Ile Glu Lys Asn Ile Thr Val Asn Tyr Asn Gly Thr Leu
290 295 300

Ile Asn Glu Thr Val Phe Glu Phe Asp Trp Lys Ser Tyr Ile Gln Asp
305 310 315 320

Ser Arg Tyr His Tyr Phe Leu Glu Gly Phe Leu Asp Ala Leu Leu Cys
325 330 335

Gly Asn Ser Ser Asp Ala Gly Gln Cys Pro Glu Gly Tyr Met Cys Val
340 345 350

Lys Ala Gly Arg Asn Pro Asn Tyr Gly Tyr Thr Ser Phe Asp Thr Phe
355 360 365

Ser Trp Ala Phe Leu Ser Leu Phe Arg Leu Met Thr Gln Asp Phe Trp
370 375 380

Glu Asn Leu Tyr Gln Leu Thr Leu Arg Ala Ala Gly Lys Thr Tyr Met
385 390 395 400

Ile Phe Phe Val Leu Val Ile Phe Leu Gly Ser Phe Tyr Leu Ile Asn
405 410 415

Leu Ile Leu Ala Val Val Ala Met Ala Tyr Glu Glu Gln Asn Gln Ala
420 425 430

Thr Leu Glu Glu Ala Glu Gln Lys Glu Ala Glu Phe Gln Gln Met Ile
435 440 445

Glu Gln Leu Lys Lys Gln Gln Glu Ala Ala Gln Gln Ala Ala Thr Ala
450 455 460

Thr Ala Ser Glu His Ser Arg Glu Pro Ser Ala Ala Gly Arg Leu Ser
465 470 475 480

Asp Ser Ser Ser Glu Ala Ser Lys Leu Ser Ser Lys Ser Ala Lys Glu

485

490

495

Arg Arg Asn Arg Arg Lys Lys Arg Lys Gln Lys Glu Gln Ser Gly Gly
 500 505 510

Glu Glu Lys Asp Glu Asp Glu Phe Gln Lys Ser Glu Ser Glu Asp Ser
 515 520 525

Ile Arg Arg Lys Gly Phe Arg Phe Ser Ile Glu Gly Asn Arg Leu Thr
 530 535 540

Tyr Glu Lys Arg Tyr Ser Ser Pro His Gln Ser Leu Leu Ser Ile Arg
 545 550 555 560

Gly Ser Leu Phe Ser Pro Arg Arg Asn Ser Arg Thr Ser Leu Phe Ser
 565 570 575

Phe Arg Gly Arg Ala Lys Asp Val Gly Ser Glu Asn Asp Phe Ala Asp
 580 585 590

Asp Glu His Ser Thr Phe Glu Asp Asn Glu Ser Arg Arg Asp Ser Leu
 595 600 605

Phe Val Pro Arg Arg His Gly Glu Arg Arg Asn Ser Asn Leu Ser Gln
 610 615 620

Thr Ser Arg Ser Ser Arg Met Leu Ala Val Phe Pro Ala Asn Gly Lys
 625 630 635 640

Met His Ser Thr Val Asp Cys Asn Gly Val Val Ser Leu Val Gly Gly
 645 650 655

Pro Ser Val Pro Thr Ser Pro Val Gly Gln Leu Leu Pro Glu Val Ile
 660 665 670

Ile Asp Lys Pro Ala Thr Asp Asp Asn Gly Thr Thr Thr Glu Thr Glu
 675 680 685

Met Arg Lys Arg Arg Ser Ser Ser Phe His Val Ser Met Asp Phe Leu
 690 695 700

Glu Asp Pro Ser Gln Arg Gln Arg Ala Met Ser Ile Ala Ser Ile Leu
 705 710 715 720

Thr Asn Thr Val Glu Glu Leu Glu Glu Ser Arg Gln Lys Cys Pro Pro
725 730 735

Cys Trp Tyr Lys Phe Ser Asn Ile Phe Leu Ile Trp Asp Cys Ser Pro
740 745 750

Tyr Trp Leu Lys Val Lys His Val Val Asn Leu Val Val Met Asp Pro
755 760 765

Phe Val Asp Leu Ala Ile Thr Ile Cys Ile Val Leu Asn Thr Leu Phe
770 775 780

Met Ala Met Glu His Tyr Pro Met Thr Asp His Phe Asn Asn Val Leu
785 790 795 800

Thr Val Gly Asn Leu Val Phe Thr Gly Ile Phe Thr Ala Glu Met Phe
805 810 815

Leu Lys Ile Ile Ala Met Asp Pro Tyr Tyr Tyr Phe Gln Glu Gly Trp
820 825 830

Asn Ile Phe Asp Gly Phe Ile Val Thr Leu Ser Leu Val Glu Leu Gly
835 840 845

Leu Ala Asn Val Glu Gly Leu Ser Val Leu Arg Ser Phe Arg Leu Leu
850 855 860

Arg Val Phe Lys Leu Ala Lys Ser Trp Pro Thr Leu Asn Met Leu Ile
865 870 875 880

Lys Ile Ile Gly Asn Ser Val Gly Ala Leu Gly Asn Leu Thr Leu Val
885 890 895

Leu Ala Ile Ile Val Phe Ile Phe Ala Val Val Gly Met Gln Leu Phe
900 905 910

Gly Lys Ser Tyr Lys Asp Cys Val Cys Lys Ile Ala Ser Asp Cys Gln
915 920 925

Leu Pro Arg Trp His Met Asn Asp Phe Phe His Ser Phe Leu Ile Val
930 935 940

Phe Arg Val Leu Cys Gly Glu Trp Ile Glu Thr Met Trp Asp Cys Met
945 950 955 960

Glu Val Ala Gly Gln Ala Met Cys Leu Thr Val Phe Met Met Val Met
965 970 975

Val Ile Gly Asn Leu Val Val Leu Asn Leu Phe Leu Ala Leu Leu Leu
980 985 990

Ser Ser Phe Ser Ala Asp Asn Leu Ala Ala Thr Asp Asp Asp Asn Glu
995 1000 1005

Met Asn Asn Leu Gln Ile Ala Val Asp Arg Met His Lys Gly Val
1010 1015 1020

Ala Tyr Val Lys Arg Lys Ile Tyr Glu Phe Ile Gln Gln Ser Phe
1025 1030 1035

Ile Arg Lys Gln Lys Ile Leu Asp Glu Ile Lys Pro Leu Asp Asp
1040 1045 1050

Leu Asn Asn Lys Lys Asp Ser Cys Met Ser Asn His Thr Ala Glu
1055 1060 1065

Ile Gly Lys Asp Leu Asp Tyr Leu Lys Asp Val Asn Gly Thr Thr
1070 1075 1080

Ser Gly Ile Gly Thr Gly Ser Ser Val Glu Lys Tyr Ile Ile Asp
1085 1090 1095

Glu Ser Asp Tyr Met Ser Phe Ile Asn Asn Pro Ser Leu Thr Val
1100 1105 1110

Thr Val Pro Ile Ala Val Gly Glu Ser Asp Phe Glu Asn Leu Asn
1115 1120 1125

Thr Glu Asp Phe Ser Ser Glu Ser Asp Leu Glu Glu Ser Lys Glu
1130 1135 1140

Lys Leu Asn Glu Ser Ser Ser Ser Ser Glu Gly Ser Thr Val Asp
1145 1150 1155

Ile	Gly	Ala	Pro	Val	Glu	Glu	Gln	Pro	Val	Val	Glu	Pro	Glu	Glu
1160						1165					1170			
Thr	Leu	Glu	Pro	Glu	Ala	Cys	Phe	Thr	Glu	Gly	Cys	Val	Gln	Arg
1175						1180					1185			
Phe	Lys	Cys	Cys	Gln	Ile	Asn	Val	Glu	Glu	Gly	Arg	Gly	Lys	Gln
1190						1195					1200			
Trp	Trp	Asn	Leu	Arg	Arg	Thr	Cys	Phe	Arg	Ile	Val	Glu	His	Asn
1205						1210					1215			
Trp	Phe	Glu	Thr	Phe	Ile	Val	Phe	Met	Ile	Leu	Leu	Ser	Ser	Gly
1220						1225					1230			
Ala	Leu	Ala	Phe	Glu	Asp	Ile	Tyr	Ile	Asp	Gln	Arg	Lys	Thr	Ile
1235						1240					1245			
Lys	Thr	Met	Leu	Glu	Tyr	Ala	Asp	Lys	Val	Phe	Thr	Tyr	Ile	Phe
1250						1255					1260			
Ile	Leu	Glu	Met	Leu	Leu	Lys	Trp	Val	Ala	Tyr	Gly	Tyr	Gln	Thr
1265						1270					1275			
Tyr	Phe	Thr	Asn	Ala	Trp	Cys	Trp	Leu	Asp	Phe	Leu	Ile	Val	Asp
1280						1285					1290			
Val	Ser	Leu	Val	Ser	Leu	Thr	Ala	Asn	Ala	Leu	Gly	Tyr	Ser	Glu
1295						1300					1305			
Leu	Gly	Ala	Ile	Lys	Ser	Leu	Arg	Thr	Leu	Arg	Ala	Leu	Arg	Pro
1310						1315					1320			
Leu	Arg	Ala	Leu	Ser	Arg	Phe	Glu	Gly	Met	Arg	Val	Val	Val	Asn
1325						1330					1335			
Ala	Leu	Leu	Gly	Ala	Ile	Pro	Ser	Ile	Met	Asn	Val	Leu	Leu	Val
1340						1345					1350			
Cys	Leu	Ile	Phe	Trp	Leu	Ile	Phe	Ser	Ile	Met	Gly	Val	Asn	Leu
1355						1360					1365			
Phe	Ala	Gly	Lys	Phe	Tyr	His	Cys	Ile	Asn	Thr	Thr	Thr	Gly	Asp

1370		1375		1380
Arg Phe Asp Ile Glu Asp Val Asn Asn His Thr Asp Cys Leu Lys				
1385		1390		1395
Leu Ile Glu Arg Asn Glu Thr Ala Arg Trp Lys Asn Val Lys Val				
1400		1405		1410
Asn Phe Asp Asn Val Gly Phe Gly Tyr Leu Ser Leu Leu Gln Val				
1415		1420		1425
Ala Thr Phe Lys Gly Trp Met Asp Ile Met Tyr Ala Ala Val Asp				
1430		1435		1440
Ser Arg Asn Val Glu Leu Gln Pro Lys Tyr Glu Glu Ser Leu Tyr				
1445		1450		1455
Met Tyr Leu Tyr Phe Val Ile Phe Ile Ile Phe Gly Ser Phe Phe				
1460		1465		1470
Thr Leu Asn Leu Phe Ile Gly Val Ile Ile Asp Asn Phe Asn Gln				
1475		1480		1485
Gln Lys Lys Lys Phe Gly Gly Gln Asp Ile Phe Met Thr Glu Glu				
1490		1495		1500
Gln Lys Lys Tyr Tyr Asn Ala Met Lys Lys Leu Gly Ser Lys Lys				
1505		1510		1515
Pro Gln Lys Pro Ile Pro Arg Pro Gly Asn Lys Phe Gln Gly Met				
1520		1525		1530
Val Phe Asp Phe Val Thr Arg Gln Val Phe Asp Ile Ser Ile Met				
1535		1540		1545
Ile Leu Ile Cys Leu Asn Met Val Thr Met Met Val Glu Thr Asp				
1550		1555		1560
Asp Gln Ser Glu Tyr Val Thr Thr Ile Leu Ser Arg Ile Asn Leu				
1565		1570		1575
Val Phe Ile Val Leu Phe Thr Gly Glu Cys Val Leu Lys Leu Ile				
1580		1585		1590

Ser	Leu	Arg	His	Tyr	Tyr	Phe	Thr	Ile	Gly	Trp	Asn	Ile	Phe	Asp
1595						1600					1605			
Phe	Val	Val	Val	Ile	Leu	Ser	Ile	Val	Gly	Met	Phe	Leu	Ala	Glu
1610						1615					1620			
Leu	Ile	Glu	Lys	Tyr	Phe	Val	Ser	Pro	Thr	Leu	Phe	Arg	Val	Ile
1625						1630					1635			
Arg	Leu	Ala	Arg	Ile	Gly	Arg	Ile	Leu	Arg	Leu	Ile	Lys	Gly	Ala
1640						1645					1650			
Lys	Gly	Ile	Arg	Thr	Leu	Leu	Phe	Ala	Leu	Met	Met	Ser	Leu	Pro
1655						1660					1665			
Ala	Leu	Phe	Asn	Ile	Gly	Leu	Leu	Leu	Phe	Leu	Val	Met	Phe	Ile
1670						1675					1680			
Tyr	Ala	Ile	Phe	Gly	Met	Ser	Asn	Phe	Ala	Tyr	Val	Lys	Arg	Glu
1685						1690					1695			
Val	Gly	Ile	Asp	Asp	Met	Phe	Asn	Phe	Glu	Thr	Phe	Gly	Asn	Ser
1700						1705					1710			
Met	Ile	Cys	Leu	Phe	Gln	Ile	Thr	Thr	Ser	Ala	Gly	Trp	Asp	Gly
1715						1720					1725			
Leu	Leu	Ala	Pro	Ile	Leu	Asn	Ser	Lys	Pro	Pro	Asp	Cys	Asp	Pro
1730						1735					1740			
Asn	Lys	Val	Asn	Pro	Gly	Ser	Ser	Val	Lys	Gly	Asp	Cys	Gly	Asn
1745						1750					1755			
Pro	Ser	Val	Gly	Ile	Phe	Phe	Phe	Val	Ser	Tyr	Ile	Ile	Ile	Ser
1760						1765					1770			
Phe	Leu	Val	Val	Val	Asn	Met	Tyr	Ile	Ala	Val	Ile	Leu	Glu	Asn
1775						1780					1785			
Phe	Ser	Val	Ala	Thr	Glu	Glu	Ser	Ala	Glu	Pro	Leu	Ser	Glu	Asp
1790						1795					1800			

Asp Phe Glu Met Phe Tyr Glu Val Trp Glu Lys Phe Asp Pro Asp
1805 1810 1815

Ala Thr Gln Phe Met Glu Phe Glu Lys Leu Ser Gln Phe Ala Ala
1820 1825 1830

Ala Leu Glu Pro Pro Leu Asn Leu Pro Gln Pro Asn Lys Leu Gln
1835 1840 1845

Leu Ile Ala Met Asp Leu Pro Met Val Ser Gly Asp Arg Ile His
1850 1855 1860

Cys Leu Asp Ile Leu Phe Ala Phe Thr Lys Arg Val Leu Gly Glu
1865 1870 1875

Ser Gly Glu Met Asp Ala Leu Arg Ile Gln Met Glu Glu Arg Phe
1880 1885 1890

Met Ala Ser Asn Pro Ser Lys Val Ser Tyr Gln Pro Ile Thr Thr
1895 1900 1905

Thr Leu Lys Arg Lys Gln Glu Glu Val Ser Ala Val Ile Ile Gln
1910 1915 1920

Arg Ala Tyr Arg Arg His Leu Leu Lys Arg Thr Val Lys Gln Ala
1925 1930 1935

Ser Phe Thr Tyr Asn Lys Asn Lys Ile Lys Gly Gly Ala Asn Leu
1940 1945 1950

Leu Ile Lys Glu Asp Met Ile Ile Asp Arg Ile Asn Glu Asn Ser
1955 1960 1965

Ile Thr Glu Lys Thr Asp Leu Thr Met Ser Thr Ala Ala Cys Pro
1970 1975 1980

Pro Ser Tyr Asp Arg Val Thr Lys Pro Ile Val Glu Lys His Glu
1985 1990 1995

Gln Glu Gly Lys Asp Glu Lys Ala Lys Gly Lys
2000 2005

<210> 5
<211> 850
<212> DNA
<213> Homo sapiens

<400> 5
ctaaaataat gctaaagttt ttcaagtact acttgaaaat agctatatatt actttcaaac 60
cttttcctct ttgagtcatt aggttcatga tattatatag caatagggaa tgaaagagaa 120
gcaaggagaa gcaatactgg gagattacag agaagaaagg aaaaaaggct gagagaaaag 180
aggttgagga agaaatcata aatctggatt gtgagaaagt gtttaatat tagccactag 240
atggcgatgt aatgtaagggt gctgtcctga cttttttttt ttttttttga aacaagctat 300
ttgctgattt gtattaggta ccatagagtg aggcgaggat gaagccgaga agatactgca 360
gaggctctctg gtgcatgtgt gtatgtgtgc gtttgtgtgt gtttgtgtgt ctgtgtgttc 420
tgccccagtg agactgcagc ccttgtaaact actttgacac cttttgcaag aaggaatctg 480
aacaattgca actgaaggca cattgttatc atctcgtctt tgggtgatgc tgttcctcac 540
tgcatgatga taattttcct tttaatcagg taagccatct aattgtttca tcttgatttt 600
aagtttattc attccagtta ttccttttga aaaagagtcc atggaaattc agtttgggca 660
gagcaggaag tccatttttg tatgtgtatt cagaccaact gtccccctcc tccctctcct 720
cctcttcttg tccccctccc cgcgccctcc tctctcaacc ttccatgaac tgaaatcagg 780
tttgttttgc agttcagcat tttgatagaa gatgggattc tttggcctga aatagcttgg 840
catctggcca 850

<210> 6
<211> 483
<212> DNA
<213> Homo sapiens

<400> 6
acatctctta gtcctctctt aaatatctgt attcctttta ttttaggaat ttcatatgca 60
gaataaatgg taattaaaaat gtgcaggatg acaagatgga gcaaacagtg cttgtaccac 120
caggacctga cagcttcaac ttcttcacca gagaatctct tgccggctatt gaaagacgca 180
ttgcagaaga aaaggcaaag aatcccaaac cagacaaaaa aagatgacga cgaaaaatgg 240
cccaaagcaa atagtgactt ggaagctgga aagaaccttc catttattta tggagacatt 300
cctccagaga tgggtgtcaga gccctggag gacctggacc cctactatat caataagaaa 360
gtgagtgttt tttttatcag gcatattttt gctgctaatt gcctactgca ttccttggac 420

tgtttagca ccaacacatg ccaatagcac aaatctagta tctctgttag aatgaacaca	480
ttt	483

<210> 7
 <211> 497
 <212> DNA
 <213> Homo sapiens

<400> 7	
taagaagaga tccagtgaca gtttgttttc atggggcact ttaggaaatt gtgattgtgc	60
tggtttctca tttaacttta caataattta ttatgacaag taacagaaag tagataacag	120
agtttaagtg gtttatactt tcatacttct atgttggtgtt cctgtcttac agacttttat	180
agtattgaat aaaggggaagg ccatcttccg gttcagtgcc acctctgccc tgtacatttt	240
aactcccttc aatcctctta ggaaaatagc tattaagatt ttggtacatt catatccttt	300
ttcaagtgat taatattaac tatttgtaca tgatctgtaa gcactttata gctaaatata	360
aaattaagtt gggaaatgtc catattatat aggtttcatc actctcattt tgcacttttg	420
tcatattagc ctcatcttta aagttcatta atcacataga cattactgaa acatgtactc	480
tttaacattt tatatat	497

<210> 8
 <211> 501
 <212> DNA
 <213> Homo sapiens

<400> 8	
tcatatacat tacctcattt aatctataca aatactcagt gaaggtgata ttattaccca	60
cattttacac atgaagaaat tgaaatgtaa ggagattaga agacttgccc acaatgcatt	120
tatccctgaa ttttggttaa gctgcagttt gggcttttca atgttagctt tttgtaatat	180
aacacttgga ttttgatttt cttttgtgtg ttccttaaca ataacctaca ttattcagca	240
tgctaattat gtgcactatt ttgacaaact gtgtgtttat gacaatgagt aaccctcctg	300
attggacaaa gaatgtagag taagttcaac ttatatTTTT aataacatat atacattygg	360
gattytgaaa ctgtgtctta atgtagtctt aaaataaaac tgaagagcat tttattaaag	420
tcattcctag acaaaattac gcagcaagag gacaatgctc attggccctc aggctgctg	480
gcgttatact gattatcact c	501

<210> 9
 <211> 563

<212> DNA
<213> Homo sapiens

<400> 9
gctaaataga tttcatatac cttgtatttc tcacactact ctttaagacac tttacgaaac 60
aactctttgt gtttaggaagc tgaattttaa tttagggtta cgtttcattt gtatgaaatt 120
aaaatccatc tgcttagttt tcttttttag tatttatcta ttccactgat ggagtataa 180
gaaattggta tgctatgaaa aaacactgtt actttatcaa attttttga tgcttgtttt 240
cagatacacc ttcacaggaa tatatacttt tgaatcactt ataaaaatta ttgcaagggg 300
attctgttta gaagatttta ctttccttcg ggatccatgg aactggctcg atttcactgt 360
cattacattt gcgtaagtgc ctttbytgaa actttaagag agaacatagt ttggttttcc 420
atcagtgtt atgcttttaa gaatagggtt gctttacctg tagaatattt ttgtgtgatt 480
tatacattca aactctggat ttcaatttag cacaacaaag gtctaagtgg aatttcacta 540
tagcatgaag gctttgcagt agt 563

<210> 10
<211> 253
<212> DNA
<213> Homo sapiens

<400> 10
cttataagcc catgcagtaa tataaatcct gctaaaatct tgaataattc tgatttaatt 60
ctacagggtt gtaacagaat ttgtaaacct aggcaatttt tcagctcttc gcactttcag 120
agtcttgaga gctttgaaaa ctatttcggt aattccaggt aagaagtgat tagagtaaag 180
gataggctct ttgtacctac agctttttct ttgtgtcctg tttttgtgtt tgtgtgtgaa 240
ctcccgctta cag 253

<210> 11
<211> 340
<212> DNA
<213> Homo sapiens

<400> 11
gtaagaagtg attagagtaa aggataggct ctttgtacct acagcttttt ctttgtgtcc 60
tgtttttgtg tttgtgtgtg aactcccgct tacaggtagc tcacagagtt tgtggacctg 120
ggcaatgtct cggcattgag aacattcaga gttctccgag cattgaagac gatttcagtc 180
attccagggt agagcaaggt tagataatga gacggaccca tcatgtgatt cagcatcctt 240
ctctgcttga cattcagttt tacagaaaat caggaatcat aagactaggt gttcaaagaa 300

atgattatta tgttagacat agcttatcag cctggagtta 340

<210> 12
<211> 409
<212> DNA
<213> Homo sapiens

<400> 12
cacgcgtgct tagccctcat agtaatagcc tcctaccttc aggcctgaaa accattgtgg 60
gagccctgat ccagtctgtg aagaagctct cagatgtaat gatcctgact gtgttctgtc 120
tgagcgtatt tgctctaatt gggctgcagc tgttcatggg caacctgagg aataaatgta 180
tacaatggcc tcccaccaat gcttccttgg aggaacatag tatagaaaag aatataactg 240
tgaattataa tggtagactt ataaatgaaa ctgtctttga gtttgactgg aagtcataa 300
ttcaagattc aagtaagaat tattgttatg tacatttcct taaaagtag aattggattg 360
tttgtaacac aaaggataaa tacttgaggg gctggatatt ccattttac 409

<210> 13
<211> 266
<212> DNA
<213> Homo sapiens

<400> 13
cgcgcaaata cttgtgcctt tgaatgaata atatatttaa aattactcaa taaacttaaa 60
agtagaacct gaccttcctg ttctctttga gtgtttttta caatgcaaatt gttcagcata 120
cgactttctt ttttcaaaca ggatatcatt atttcctgga gggtttttta gatgcactac 180
tatgtggaaa tagctctgat gcagggtaag tcaatattgt gtgcatctgt gtatattgta 240
tgtacacaat acatatgtgt atcttt 266

<210> 14
<211> 604
<212> DNA
<213> Homo sapiens

<400> 14
agggtgtgaa aatgcaaatt atcaacaaaa attattttgt aaaatattat tagaaatgct 60
gcacatatt ttaatgatga caccaagtag ctaataagac tatatgcagt caaaagttgg 120
gaaatagatt agttacttat ttgtcaaact tttattttga aataccaaat ctttctgact 180
aggcaatatc atagcatagt atcagagtaa aaaggcagca gaacgacttg taatactttc 240
ttttaccca cttgcagcca atgtccagag ggatatatgt gtgtgacagc tggtagaaat 300

cccaattatg gctacacaag ctttgatacc ttcagttggg cttttttgtc cttgtttcga	360
ctaattgactc aggactttctg ggaaaatctt tatcaactgg tgagaactaa agagccacac	420
tctccattta agtaaaagta tacaagaaaa ccaattgagt tatgaaatta aaaccggatg	480
ataatatagt agaaagagca gaacttgaca cgagacttga gttcctctat cctattgatt	540
ataacacata ctgagcagag tgatgccaag gattgcaatt ctctcccatt tcttcttggc	600
tcaa	604

<210> 15
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 15	
ttatatctga gttttgctag ccacatgagt aaattgaaag ttgagcacc ttagtgaata	60
atattgggaa ataattctga tatttttgtt tgcagacatt acgtgctgct gggaaaacgt	120
acatgatatt ttttgtattg gtcattttct tgggctcatt ctacctaata aatttgatcc	180
tggctgtggt ggccatggcc tacgaggaac agaatcaggc caccttgga gaagcagaac	240
agaaagaggc cgaatttcag cagatgattg aacagcttaa aaagcaacag gaggcagctc	300
aggtaagctg ccctgctcat ggcaactgacc tttatcgtct gatgtactat atgagagaag	360
tagtctagag cgtgtgat	378

<210> 16
 <211> 845
 <212> DNA
 <213> Homo sapiens

<400> 16	
caaccctaatt taaataccaa tttttaaaagt aaatcaaatt ccaaaaagta atgaatttat	60
tttcttggtg atacatgttg gatatttttg aatacgtggt ctgtggagca ttaacagaga	120
cataataaat gttaccatgg agcaaaactaa attatctcca aaagccttca ttaggtagaa	180
agaaaaaaaa aatctcctct tataacttgca gagaatcttc tctgtgagat gatcttcagt	240
cagttcaata tattttttta aagccatgca aatacttcag ccctttcaaa gaaagataca	300
gtctcttcag gtgctatgtt aaaatcattt ctcttcaata tagcaggcag caacggcaac	360
tgcctcagaa cattccagag agcccagtg agcaggcagg ctctcagaca gctcatctga	420
agcctctaag ttgagttcca agagtgctaa ggaaagaaga aatcggagga agaaaagaaa	480

acagaaagag cagtctggtg ggggaagagaa agatgaggat gaattccaaa aatctgaatc	540
tgaggacagc atcaggaggw aagggttttcg cttctccatt gaagggaacc ggttgacata	600
tgaaaagagg tactcctccc cacaccaggt atggcactgc tgagtttact gatgcatggt	660
tgaaaattaa aacatgggag agagggggag atttagaaaa tggactcagg aatttttatc	720
aactgaatca accactgttg tggttatattt aaacccatcc cttcttcaca tagttatgca	780
aaaactttac tccacagata tgtaagtcta cagctcggtg tagttaagat aacaccaagt	840
tgaca	845

<210> 17
 <211> 965
 <212> DNA
 <213> Homo sapiens

<400> 17	
cattgccata ttctaaggat gtttcccttt gaacttgaga aatggtcgtt caggggtgtgt	60
gtgtatgtgt gtgtgtgtgt gtttcaatat gttaagggtg caatctatct cctcattctt	120
taatcccaag ggctagaaac tttcttttat caaggtaatt taatttaatg tgaatgcaca	180
taaaatgaga atgataatca aaaggaatga accatattct gttatgaatg ctgaaatctc	240
cttctacata atcttgcaaa atgaaatcac attcaaatgt ccatattaat atgactctat	300
ttgtbtgctc tttcaaaact ctagtctttg ttgagcatcc gtggctccct attttcacca	360
aggcgaaata gcagaacaag ccttttcagc tttagagggc gagcaaagga tgtgggatct	420
gagaacgact tcgcagatga tgagcacagc acctttgagg ataacgagag ccgtagagat	480
tccttgtttg tgccccgacg acacggagag agacgcaaca gcaacctgag tcagaccagt	540
aggtcatccc ggatgctggc agtgtttcca gcgaatggga agatgcacag cactgtggat	600
tgcaatggtg tgggttcctt ggttggtgga cttcagttc ctacatcgcc tgttgacag	660
cttctgccag aggtgataat agataagcca gctactgatg acaatgtaag gaagtyttaa	720
atagttcagg catggctggc tcactattgc tgcaccagcc agtgtgtcta cagaacggca	780
accttgagaa tgattcctgg ttggtcacgc tgtgaatgca cctgcatctt gtaatatctt	840
tgatagacta accaactaaa acttaaaacc ttagcagtcg cctgcacaaa cctgaatgca	900
tttacttatt aaaagtgcta aggattgatt agacacaata attactgcct ccagttggag	960
gattt	965

<210> 18

<211> 641
<212> DNA
<213> Homo sapiens

<400> 18
aagagtttta tcaactatat taaaattatt ttgtatttta taaaattatg aaatcaggaa 60
gttaacatct tgggtttttgc tgtatgacta aatggttaac agtttgaaca ttccaggcta 120
atgatacaat aagtcagaaa tatctgccat caccaattga atatgaaagt gcatgatgca 180
tgtgtttcat gaaattcact gtgtcaccat ttggttgttt gcttgtcata ttgctcaaat 240
taattgttta atgcattagc attttttttt acaggggaaca accactgaaa ctgaaatgag 300
aaagagaagg tcaagttctt tccacgtttc catggacttt ctagaagatc cttcccaaag 360
gcaacgagca atgagtatag ccagcattct aacaaatata gtagaagggt ggtaacaaat 420
tctattttcg tttcaattat tttcaccaaa cttatattgt ctcatattcaa acaaatatat 480
ttgtgagttg ggaatagtgc attctaataa aaagacagtc taattcaaga gctgttattt 540
cttatatcta ctcagatatt ctagaagcct taacaattta ttttaaaatg agtgatattg 600
ggactaagac tgttttccta actgtgtagc aactctttga a 641

<210> 19
<211> 818
<212> DNA
<213> Homo sapiens

<400> 19
gtgaggcggc acatgaaaga ccacccattt aacctgaggc caagtgtgta gccacaatgg 60
cagtgcataa gacaaaaaac tacccattgt tacctgggcc ctatgtgtgt gtctgatgaa 120
ataaccttgg gaggtttaga gtaaactgta atttttttta caagtacaaa aaaggggtgtc 180
tctgtaacaa aaatgtgttg attactgaaa ataagttag tggatatgaa ataaatgtgt 240
gtgtataaag tawacctttt ggtgggtctt tttttttttt ttcttaatct agaacttgaa 300
gaatccaggc agaaatgccc accctgttgg tataaatttt ccaacatatt cttaatctgg 360
gactgttctc catattgggt aaaagtgaac catgttgtca acctgggtgt gatggacca 420
tttgttgacc tggccatcac catctgtatt gtcttaaata ctcttttcat ggccatggag 480
cactatccaa tgacggacca tttcaataat gtgcttacag taggaaactt ggtaagcata 540
ttggaaggta aatgtgttta gtcttcaaat tttctgcttg aaaaactgtt tacatttaat 600
tgtgtatagc agtctttcaa ccaccttca tgcttcttgg cccctgcaaa atcgcaatta 660
tatttagctg gctatactct acttttttgc caaaaataat cacccttaat gtgctcacia 720

aaactgagaa aggcataaggc ctacagcact acttgaaaag tcaacagcaa tatttataat	780
ttttcaggat ccagaagtag ctcatagatt aagaacat	818

<210> 20
 <211> 645
 <212> DNA
 <213> Homo sapiens

<400> 20	
caagccattt caccatctg aagacctcag tttccttattc tgtaaagtaa taattgtata	60
ttatctactt cgcgtttcca caaggataaa attaaataat gtatatgawa gtctttcatc	120
aactacaaat tgccatacaa atttaagtta gtaatagaat cattgtggga aaatagcata	180
agcattatgt tctaagagca aatcttatgt catgtatgtt attatctggg ggaattagat	240
taattttgtt ttgatcttag gttttcactg ggatctttac agcagaaatg tttctgaaaa	300
ttattgccat ggatccttac tattatttcc aagaaggctg gaatatcttt gacgggttta	360
ttgtgacgct tagcctggta gaacttggac tcgccaatgt ggaagggtta tctgttctcc	420
gttcatttcg attggtaaaa aaaaaaaaaa aaggaaccaa attcaaaaac ctttctaaca	480
ttcaggggttc ttgcatagca ttgtcatagt ttttttgcca cacaaccatt aggcatgtga	540
agtttttctg taacatttgc attgtcaaaa acttttctta catgggaata attctcaatt	600
attaggttac cttagttcaa gggcwaggtc ggaaaggtta cggtt	645

<210> 21
 <211> 829
 <212> DNA
 <213> Homo sapiens

<400> 21	
gaattctaata gaccatttct aggtaaagct caatatatat aatgctttta agaatcatac	60
aaatatatat taatctttca ttttccagct gcgagatttc aagttggcaa aatcttggcc	120
aacgttaaata atgctaataa agatcatcgg caattccgtg ggggctctgg gaaatttaac	180
cctcgtcttg gccatcatcg tcttcatttt tgccgtggtc ggcatgcagc tctttggtaa	240
aagctacaaa gatttgtgtc gcaagatcgc cagtgtatgt caactccac gctggcacat	300
gaatgacttc ttccactcck hccgtgattgt gttccgcgtg ctgtgtgggg agtggataga	360
gaccatgtgg gactgtatgg aggttgctgg tcaagccatg tgccttactg tcttcatgat	420
ggcatggtg attggaaacc tagcggtatg taccactta agatatgcat tttggaaata	480

caccagcatg gcacatgtat acatatgtaa ctaacctgca cattgtgcac atgtacccta	540
aaacttaaag tataataaaa aaaaagagta taatttaatg gtgactgttt tgtcaaaaag	600
aaaaacaaac tatgattatt ggtttaaaag tccattacct tggatatatt atcactttaa	660
caacacagca atatabcagt gccctgcat tttttatacc aaattctatt ttgtcagtca	720
ctttatcaca ttttttatgt gaattacaat agagtatcat attgagatga gcctaaaagg	780
atgtgctggg accattttat aaattcagag ccaaggaaga gagaagtct	829

<210> 22
 <211> 909
 <212> DNA
 <213> Homo sapiens

<400> 22	
gaattctcgt attgtacaca tataaatctg ttttcttcta ctcatacaat tttagagtta	60
acaaaacctt agattagctc attcaatttc actttacgaa tgggagaact tgagagcaac	120
agaaatcatg tctttgtcca aggatgtgct attgagccag tcacaaattc agatcaccca	180
tcttctaadc actatgctgt ggtgtttcct tctcatcaag ttttagaact tagagttttt	240
tccacactta aaagaaagaa taagtgattg taatctgctc ttcctacat tgggtgaaaa	300
ttataatcat gtttttggtg tttttaaggc cctgaatctc tttctggcct tgcttctgag	360
ctcatttagt gcagacaacc ttgcagccac tgatgatgat aatgaaatga ataatctcca	420
aattgctgtg gataggatgc acaaaggagt agcttatgtg aaaagaaaaa tatatgartt	480
tattcaacag tccttcatta ggaaacaaaa gatttttagat gaaattaaac cacttgatga	540
tctaaacaac aagaaagaca gttgtatgtc caatcataca gcagaaattg ggaaagatct	600
tgactatctt aaagatgtaa atggaactac aagtggata ggaactggca gcagtgttga	660
aaaatacatt attgatgaaa gtgattacat gtcattcata aacaaccca gtcttactgt	720
gactgtacca attgctgtag gagaatctga ctttgaaaat ttaaacacgg aagactttag	780
tagtgaatcg gatctggaag aaagcaaaga ggtaagattc tatagggtgtg ggtaggtatg	840
aatacatata catatatata tatacacaca tacagatgay cctcagctta atgatgtttt	900
tacttaaga	909

<210> 23
 <211> 516
 <212> DNA
 <213> Homo sapiens

<220>
<221> misc_feature
<222> (393)..(393)
<223> n = a, c, t or g

<220>
<221> misc_feature
<222> (415)..(415)
<223> N = a, c, t or g

<220>
<221> misc_feature
<222> (454)..(454)
<223> N = a, c, t or g

<220>
<221> misc_feature
<222> (513)..(513)
<223> n = a, c, t or g

<400> 23
aagcttacat tgtgaattat ggtaaaaggg ttagcacaga caatgatttt cttatttctt 60
ccccttatct aatctctctt tttctctaaa aatatctcta cctcaagaag aataaaaaac 120
aaattcatag taataatcct tcttggcagg caacttatta ccaaaattaa ggactttact 180
ttctatgtcc atctcactta cagaaactga atgaaagcag tagctcatca gaaggtagca 240
ctgtggacat cggcgcacct gtagaagaac agcccgtagt ggaacctgaa gaaactcttg 300
aaccgaagc ttgtttcact gaaggtaaag aaaagaatcc taatgttaat ctttcatttg 360
gagtgcagct tatttagctg ttggtcagct aanataaatc acatataata aaatngcact 420
ttgtaataga tataattcaa tcacctctaa tatnttgaca gacaaaaaaaa cttaaagtct 480
agtgtcatgc tttgattata tctgcccaat atntgg 516

<210> 24
<211> 640
<212> DNA
<213> Homo sapiens

<400> 24
ccattttaa atgtggctgaat gtttccacaa cttcacacag ctgatgaatg tgctcttact 60
actctaggct tagagagcta tgctagcaag acagagatga gcatagtaat aaaaagacaa 120
gacaaggaca ttgctaaagg atattatgga agcagagaca ctttatctac ttttatttca 180
acactttctg caggctgtgt acaaagattc aagtgttgct aaatcaatgt ggaagaaggc 240
agaggaaaac aatgggtggaa cctgagaagg acgtgtttcc gaatagttga acataactgg 300

tttgagacct tcattgtttt catgattctc cttagtagtg gtgctctggg gagtgagatt	360
aagaaaaggt gatacagcac taatttttag aacactctaa tactgatgac ttattaatcc	420
tttgtttcat tgtcttagta tccaatgcat ttttaattat cccaccttgt atcttctata	480
gatttactct ataactctat atttctggat taacttttac tatgtatgta aatataattt	540
taagaagcta atcattaatt tttgcttact attaaatagc ccagaaagtg tagcccttca	600
gcttattcat taacaccaa ggatgtgaat attcaattac	640

<210> 25
 <211> 607
 <212> DNA
 <213> Homo sapiens

<400> 25	
ccacatcagg atacaacatc aagaactatt tcctgactaa gtcaaattaa ttcattggaa	60
tcatactttt ctttttcttc caccaatagt ctttccctg attaaataag taaaagacct	120
ttgcgaggaa aaaaaaaaaag taacagtaac tactgtttct ctgccctcct attccaatga	180
aatgtcatat gcatatgatt aattttttta atagcttatg gagtataatt atttttgaaa	240
gctaataatg tgtaacattt tctttatagg catttgaaga tatatatatt gaycagcgaa	300
agacgattaa gacgatgttg gaatatgctg acaaggtttt cacttacatt ttcattctgg	360
aaatgcttct aaaatgggtg gcatatggct atcaaacata tttaccaat gcctggagtt	420
ggctggactt cttaattggt gatgtaggta tcgttcatat ttttgtctct gttcaaggta	480
gcttgtctta tttatattca aattctacaa tagtgagtct cagaccacta tgttatgttg	540
acagactata atarccacta aacgcatata tgcaatgaga gtgtcatttc tggaagacaa	600
gggctaa	607

<210> 26
 <211> 336
 <212> DNA
 <213> Homo sapiens

<400> 26	
aaaaattata cttgtcgtat tatatagcaa ctacacattg aatgatgatt ctgtttatta	60
attgttatta ttcytgtgtg tgcaggtttc attggtcagt ttaacagcaa atgccttggg	120
ttactcagaa cttggagcct atcaatctct caggacacta agagctctga gacctctaag	180
agccttatct cgatttgaag ggatgagggt aagaaaaatg aaagaacctg aagtattgta	240
tatagccaaa attaaactaa attaaattta gaaaaagga aaaatgtatg catgcaaaag	300

gaatggcaaa ttcttgcaaa atgctcttta ttgttt 336

<210> 27

<211> 677

<212> DNA

<213> Homo sapiens

<400> 27

cttgggtata ttgcctatag ttgttttcct aagtgtattg ctttaagaaaa aaaaatgaat 60
ttaaagattt ttttgaacct tgcttttaca taccctagaa taaatagcat tgatagaaaa 120
aaagaatgga aagaccagag attactaggg gaattttttt tctttattaa cagataagaa 180
ttctgacttt tctttttttc catttggtga ttaggtggtt gtgaatgcc ttttaggagc 240
aattccatcc atcatgaatg tgcttctggt ttgtcttata ttctggctaa ttttcagcat 300
catgggcgta aatttggttg ctggcaaatt ctaccactgt attaacacca caactggtga 360
caggtttgac atcgaagacg tgaataatca tactgattgc ctaaaactaa tagaaagaaa 420
tgagactgct cgatggaaaa atgtgaaagt aaactttgat aatgtaggat ttgggtatct 480
ctctttgctt caagttgtaa gtgaacacta ttttctctga atatttttat tgtttggaat 540
aataacaaaa taatgacata catctattat ttagttccta agaaaaagta tatatttctt 600
tctatttaaa aaatttcaat ttgttagtac aagtttatga gccagatgg gtgaaaactt 660
tattacatgt aaggact 677

<210> 28

<211> 457

<212> DNA

<213> Homo sapiens

<400> 28

aatggccatt ttgttcaata tgtgttctag aaatgaaaag ccatactaaa atactgtctt 60
ggtcacaaat ctgtgtaaaa tttgttttga aatgtctttc aaaaatattc ctttttgaaa 120
attatatcag taagaatatt tattaacat caggtctaaa ttatttttac tccaaagtaa 180
aacatgcatg tccttcttaa taggccacat tcaaaggatg gatggatata atgtatgcag 240
cagttgattc cagaaatgta agtattcctt gtattctaag tctttttaca atattgatca 300
ggtggtaaaa ttaatcgaat aaagcataaa cgaccaaagt aaatgattct atcttgattt 360
aaaatatttg ggaaaaagtg tgacaggtaa atattcaagc atagcaatgt ttatcagaaa 420
gatcttacta agataattca acacatgaat tattttg 457

<210> 29
<211> 379
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (43)..(43)
<223> n = a, c, t or g

<400> 29
cagaaaaaaa aaaaatgctg acatattagt aagaataatt ttntctattg ttatgaaaaa 60
gcaccagtga cgatttccag cactaaaatg tatggtaata ttttacaaaa tattcccctt 120
tggtaggtgg aactccagcc taagtatgaa gaaagtctgt acatgtatct ttactttggt 180
attttcatca tctttgggtc cttcttcacc ttgaacctgt ttattgggtg catcatagat 240
aatttcaacc agcagaaaaa gaagataagt atttctaata ttttctctcc cactgagata 300
gaaaaattat tccttgaggt gttttctctg ccaaagaggt acttgaattt agaacaaatg 360
ggagtatata ttataactg 379

<210> 30
<211> 393
<212> DNA
<213> Homo sapiens

<400> 30
gtcattttga attatttagg gaattaaaat attatcatat ctaaagagta caattttttt 60
tacattttta atcccagata taattatact aatcagttga attttgtatt tcttttttta 120
gccatccatt ttctatttta acattgaaaa aaatgtacaa aaggacacag ttttaaccag 180
tttgattttt cttttctata ctttgagggt caagacatct ttatgacaga agaacagaag 240
aaatactata atgcaatgaa aaaattagga tcgaaaaaac cgcaaaagcc tatacctcga 300
ccaggagtaa gaagtatcaa atgatatggg ggaaaataca aaaacaaaaa ctgcatgctt 360
gtctcacaaa aaagaaaagt aagctaaaca ttt 393

<210> 31
<211> 539
<212> DNA
<213> Homo sapiens

<400> 31
ttttaacaat taattatgct ataaattcat tcttacaaaa atcatttgga atgactactt 60

tgcaagaaac tagaaagtca attaatgcag aaagtactta atgctaatagc acatgagaaa	120
aactcctttg ttgttaaaag catttctatt tctctacaga acaaatttca aggaatggtc	180
tttgacttcg taaccagaca agtttttgac ataagcatca tgattctcat ctgtcttaac	240
atggtcacaa tgatgggtga aacagatgac cagagtgaat atgtgactac cattttgtca	300
cgcacatcaatc tgggtgttcat tgtgctatct actggagagt gtgtactgaa actcatctct	360
ctacgccatt attattttac cattggatgg aatatttttg attttgtggg tgtcattctc	420
tccattgtag gtaagaaata tttaaagttc ttaaattcag ttaaataaaa gtgaaagctg	480
aaacaatcaa gattagattc aagatcatcc cagcaatcag agataatcac tgtaaatat	539

<210> 32
 <211> 3403
 <212> DNA
 <213> Homo sapiens

<400> 32	
agtatatatt atatatagtt gtcataattta atataactgg gttcaggact ctgaacctta	60
ccttgagact ttagaagaaa catatgttta ttttaacgca tgatttcttc actgggtggg	120
attctcattg tttattcata ggtatgtttc ttgccgagct gatagaaaag tatttcgtgt	180
cccctaccct gttccgagt atccgtcttg ctaggattgg ccgaatccta cgtctgatca	240
aaggagcaaa ggggatccgc acgctgctct ttgctttgat gatgtccctt cctgcgttgt	300
ttaacatcgg cctcctactc ttcttagtca tgttcatcta cgccatcttt gggatgtcca	360
actttgccta tgtaagagg gaagttggga tcgatgacat gttcaacttt gagaccttg	420
gcaacagcat gatctgccta ttccaaatta caacctctgc tggctgggat ggattgctag	480
caccattct caacagtaag ccacccgact gtgaccctaa taaagttaac cctggaagct	540
cagttaagg agactgtggg aaccatctg ttggaatttt cttttttgtc agttacatca	600
tcatatcctt cctggttgtg gtgaacatgt acatcgcggt catcctggag aacttcagt	660
ttgctactga agaaagtga gagcctctga gtgaggatga ctttgagatg ttctatgagg	720
tttgggagaa gtttgatccc gatgcaactc agttcatgga atttgaaaaa ttatctcagt	780
ttgcagtgcg cttgaaccgc ctctcaatct gccacaacca aacaaactcc agctcattgc	840
catggatttg cccatggtga gtggtgaccg gatccactgt cttgatatct tatttgcttt	900
tacaaagcgg gttctaggag agagtggaga gatggatgct ctacgaatac agatggaaga	960
gcgattcatg gttccaatc cttccaaggt ctctatcag ccaatcacta ctactttaaa	1020

acgaaaacaa	gaggaagtat	ctgctgtcat	tattcagcgt	gcttacagac	gccacctttt	1080
aaagcgaact	gtaaaacaag	cttcctttac	gtacaataaa	aacaaaatca	aaggtggggc	1140
taatcttctt	ataaaagaag	acatgataat	tgacagaata	aatgaaaact	ctattacaga	1200
aaaaactgat	ctgaccatgt	ccactgcagc	ttgtccacct	tcctatgacc	gggtgacaaa	1260
gccaattgtg	gaaaaacatg	agcaagaagg	caaagatgaa	aaagccaaag	ggaaataaat	1320
gaaaataaat	aaaaataatt	gggtgacaaa	ttgtttacag	cctgtgaagg	tgatgtattt	1380
ttatcaacag	gactccttta	ggaggtcaat	gccaaactga	ctgtttttac	acaaatctcc	1440
ttaaggtcag	tgcttacaat	aagacagtga	ccccttgtca	gcaaactgtg	actctgtgta	1500
aaggggagat	gaccttgaca	ggaggttact	gttctcacta	ccagctgaca	ctgctgaaga	1560
taagatgcac	aatggctagt	cagactgtag	ggaccagttt	caaggggtgc	aaacctgtga	1620
ttttgggggt	gtttaacatg	aaacacttta	gtgtagtaat	tgtatccact	gtttgcattt	1680
caactgccac	atttgtcaca	tttttatgga	atctgttagt	ggattcatct	ttttgttaat	1740
ccatgtgttt	attatatgtg	actatTTTTg	taaacgaagt	ttctgttgag	aaataggcta	1800
aggacctcta	taacaggtat	gccacctggg	gggtatggca	accacatggc	cctcccagct	1860
acacaaaagtc	gtggtttgca	tgagggcatg	ctgcacttag	agatcatgca	tgagaaaaag	1920
tcacaagaaa	aacaaattct	taaatttcac	catatttctg	ggaggggtaa	ttgggtgata	1980
agtggagggtg	ctttgttgat	cttgttttgc	gaaatccagc	ccctagacca	agtagattat	2040
ttgtgggtag	gccagtaaat	cttagcaggt	gcaaacttca	ttcaaagtgt	tggagtcata	2100
aatgttatgt	ttctttttgt	tgtattaaaa	aaaaaacctg	aatagtgaat	attgcccttc	2160
accctccacc	gccagaagac	tgaattgacc	aaaattactc	tttataaatt	tctgcttttt	2220
cctgcacttt	gtttagccat	cttcggctct	cagcaagggt	gacactgtat	atgttaatga	2280
aatgctattt	attatgtaaa	tagtcatttt	accctgtggg	gcacgtttga	gcaaacaaat	2340
aatgacctaa	gcacagtatt	tattgcatca	aatatgtacc	acaagaaatg	tagagtgcaa	2400
gctttacaca	ggtaataaaa	tgtattctgt	accatttata	gatagtttgg	atgctatcaa	2460
tgcatgttta	tattaccatg	ctgctgtatc	tggtttctct	cactgctcag	aatctcattt	2520
atgagaaacc	atatgtcagt	ggtaaagtca	aggaaattgt	tcaacagatc	tcattttattt	2580
aagtcattaa	gcaatagttt	gcagcacttt	aacagctttt	tggttatttt	tacatttttaa	2640
gtggataaca	tatggtatat	agccagactg	tacagacatg	tttaaaaaaa	cacactgctt	2700
aacctattaa	atatgtgttt	agaattttat	aagcaaatat	aaatactgta	aaaagtcact	2760

ttatttttatt tttcagcatt atgtacataa atatgaagag gaaattatct tcaggttgat	2820
atcacatca cttttcttac tttctgtcca tagtactttt tcatgaaaga aatttgctaa	2880
ataagacatg aaaacaagac tgggtagttg tagatttctg ctttttaaata tacatttgct	2940
aatttttagat tatttcacaa ttttaaggag caaaataggt tcacgattca tatccaaatt	3000
atgcttttgca attggaaaag ggtttaaaat tttatttata tttctggtag tacctgcact	3060
aactgaattg aaggtagtgc ttatgttatt tttgttcttt ttttctgact tcggtttatg	3120
ttttcatttc tttggagtaa tgctgctcta gattgttcta aatagaatgt gggcttcata	3180
atTTTTTTTT ccacaaaaac agagtagtca acttatatag tcaattacat caggacattt	3240
tgtgtttctt acagaagcaa accataggct cctcttttcc ttaaaactac ttagataaac	3300
tgtattcgtg aactgcatgc tggaaaatgc tactattatg ctaaataatg ctaaccaaca	3360
tttaaaatgt gcaaaactaa taaagattac atttttttatt tta	3403

<210> 33

<211> 8349

<212> DNA

<213> Homo sapiens

<400> 33

ttcttggtgc cagcttatca atcccaaact ctgggtgtaa aagattctac agggcacttt	60
cttatgcaag gagctaaaca gtgattaaag gagcaggatg aaaagatggc acagtcagtg	120
ctggtaccgc caggacctga cagcttccgc ttctttacca gggaatccct tgctgctatt	180
gaacaacgca ttgcagaaga gaaagctaag agacccaaac aggaacgcaa ggatgaggat	240
gatgaaaatg gcccaaagcc aaacagtgc ttggaagcag gaaaatctct tccatttatt	300
tatggagaca ttctccaga gatggtgtca gtgccctgg aggatctgga cccctactat	360
atcaataaga aaacgtttat agtattgaat aaagggaag caatctctcg attcagtgcc	420
accctgccc ttacatttt aactcccttc aaccctatta gaaaattagc tattaagatt	480
ttggtacatt ctttattcaa tatgttcatt atgtgcacga ttcttaccaa ctgtgtattt	540
atgaccatga gtaaccctcc agactggaca aagaatgtgg agtatacctt tacaggaatt	600
tatacttttg aatcacttat taaaatactt gcaaggggct tttgtttaga agatttcaca	660
tttttacggg atccatggaa ttggttgat ttcacagtca ttacttttgc atatgtgaca	720
gagtttgtgg acctgggcaa tgtctcagcg ttgagaacat tcagagttct ccgagcattg	780
aaaacaattt cagtcattcc aggcctgaag accattgtgg gggccctgat ccagtcagtg	840

aagaagcttt ctgatgtcat gatcttgact gtgttctgtc taagcgtggt tgcgctaata	900
ggattgcagt tgttcatggg caacctacga aataaatggt tgcaatggcc tccagataat	960
tcttcctttg aaataaatat cacttccttc tttacaatt cattggatgg gaatggtact	1020
actttcaata ggacagtgag catatttaac tgggatgaat atattgagga taaaagtcac	1080
ttttatTTTT tagaggggca aaatgatgct ctgctttgtg gcaacagctc agatgcaggc	1140
cagtgtcctg aaggatacat ctgtgtgaag gctggtagaa accccaacta tggctacacg	1200
agctttgaca cctttagttg ggcctttttg tccttatttc gtctcatgac tcaagacttc	1260
tgggaaaacc tttatcaact gacactacgt gctgctggga aaacgtacat gatatttttt	1320
gtgctgggtca ttttcttggg ctcatctat ctaataaatt tgatcttggc tgtggtggcc	1380
atggcctatg aggaacagaa tcaggccaca ttggaagagg ctgaacagaa ggaagctgaa	1440
tttcagcaga tgctcgaaca gttgaaaaag caacaagaag aagctcaggc ggcagctgca	1500
gccgcctctg ctgaatcaag agacttcagt ggtgctggtg ggataggagt tttttcagag	1560
agttcttcag tagcatctaa gttgagctcc aaaagtgaag aagagctgaa aaacagaaga	1620
aagaaaaaga aacagaaaga acagtctgga gaagaagaga aaaatgacag agtcctaaaa	1680
tcggaatctg aagacagcat aagaagaaaa ggtttcctgt tttccttgga aggaagtagg	1740
ctgacatatg aaaagagatt ttcttctcca caccagtcct tactgagcat ccgtggctcc	1800
cttttctctc caagacgcaa cagtagggcg agccttttca gcttcagagg tcgagcaaag	1860
gacattggct ctgagaatga ctttctgat gatgagcaca gcaccttga ggacaatgac	1920
agccgaagag actctctggt cgtgccgcac agacatggag aacggcgcca cagcaatgtc	1980
agccaggcca gccgtgcctc caggggtgct cccatcctgc ccatgaatgg gaagatgcat	2040
agcgtgtggt actgcaatgg tgtggtctcc ctggctgggg gcccttctac cctcacatct	2100
gctgggcagc tcctaccaga gggcacaact actgaaacag aaataagaaa gagacggtcc	2160
agttcttctc atgtttccat ggattttatt gaagatccta catcaaggca aagagcaatg	2220
agtatagcca gtattttgac caacaccatg gaagaacttg aagaatccag acagaaatgc	2280
ccaccatgct ggtataaatt tgctaatatg tgtttgattt gggactgttg taaaccatgg	2340
ttaaagggtga aacaccttgt caacctggtt gtaatggacc ctttgttgga cctggccatc	2400
accatctgca ttgtcttaaa tacactcttc atggctatgg agcactatcc catgacggag	2460
cagttcagca gtgtactgtc tgttggaaac ctggtcttca cagggatctt cacagcagaa	2520

atgtttctca agataattgc catggatcca tattattact ttcaagaagg ctggaatatt	2580
tttgatgggt ttattgtgag ccttagttta atggaacttg gtttggcaaa tgtggaagga	2640
ttgtcagttc tccgatcatt ccggctgctc cgagttttca agttggcaaa atcttggcca	2700
actctaaata tgctaattaa gatcattggc aattctgtgg gggctctagg aaacctcacc	2760
ttggtattgg ccatcatcgt cttcattttt gctgtggctg gcatgcagct ctttggtaag	2820
agctacaaaag aatgtgtctg caagatttcc aatgattgtg aactcccacg ctggcacatg	2880
catgactttt tccactcctt cctgatcgtg ttccgctgctc tgtgtggaga gtggatagag	2940
accatgtggg actgtatgga ggtcgtggtc caaaccatgt gccttactgt cttcatgatg	3000
gtcatgggtga ttggaaatct agtggttctg aacctcttct tggccttgct tttgagttcc	3060
ttcagttctg acaatcttgc tgccactgat gatgataacg aaatgaataa tctccagatt	3120
gctgtgggaa ggatgcagaa aggaatcgat tttgttaaaa gaaaaatacg tgaatttatt	3180
cagaaagcct ttgttaggaa gcagaaagct ttagatgaaa ttaaaccgct tgaagatcta	3240
aataataaaa aagacagctg tatttccaac cataccacca tagaaatagg caaagacctc	3300
aattatctca aagacggaaa tggaactact agtggcatag gcagcagtgt agaaaaatat	3360
gtcgtgggatg aaagtgatta catgtcattt ataaacaacc ctagcctcac tgtgacagta	3420
ccaattgctg ttggagaatc tgactttgaa aatttaaata ctgaagaatt cagcagcgag	3480
tcagatatgg aggaaagcaa agagaagcta aatgcaacta gttcatctga aggcagcacg	3540
gttgatattg gagctcccg ctagggagaa cagcctgagg ttgaacctga ggaatccctt	3600
gaacctgaag cctgttttac agaagactgt gtacggaagt tcaagtgttg tcagataagc	3660
atagaagaag gcaaagggaa actctggtgg aatttgagga aaacatgcta taagatagtg	3720
gagcacaatt ggttcgaaac cttcattgtc ttcattgattc tgctgagcag tggggctctg	3780
gcctttgaag atatatacat tgagcagcga aaaaccatta agaccatgtt agaatatgct	3840
gacaagggtt tcacttacat attcattctg gaaatgctgc taaagtgggt tgcatatggt	3900
tttcaagtgt attttaccaa tgctgtgtgc tggctagact tcctgattgt tgatgtctca	3960
ctggtttagct taactgcaaa tgccttgggt tactcagaac ttggtgccat caaatccctc	4020
agaacactaa gagctctgag gccactgaga gctttgtccc ggtttgaagg aatgagggtc	4080
gttgtaaatg ctcttttagg agccattcca tctatcatga atgtacttct ggtttgtctg	4140
atcttttggc taatattcag tatcatggga gtgaatctct ttgctggcaa gttttaccat	4200
tgtattaatt acaccactgg agagatgttt gatgtaagcg tggccaacaa ctacagtgag	4260

tgcaaagctc	tcattgagag	caatcaaact	gccaggtgga	aaaatgtgaa	agtaaacttt	4320
gataacgtag	gacttgata	tctgtctcta	cttcaagtag	ccacgtttta	gggatggatg	4380
gatattatgt	atgcagctgt	tgattcacga	aatgtagaat	tacaacccaa	gatatgaagac	4440
aacctgtaca	tgtatcttta	ttttgtcatc	tttattat	ttggttcatt	ctttaccttg	4500
aatcttttca	ttgggtgcat	catagataac	ttcaaccaac	agaaaaagaa	gtttggagggt	4560
caagacattt	ttatgacaga	agaacagaag	aaatactaca	atgcaatgaa	aaaactgggt	4620
tcaaagaaac	cacaaaaacc	catacctcga	cctgctaaca	aattccaagg	aatgggtcttt	4680
gattttgtaa	ccaaacaagt	ctttgatatc	agcatcatga	tcctcatctg	ccttaacatg	4740
gtcaccatga	tggtggaaac	cgatgaccag	agtcaagaaa	tgacaaacat	tctgtactgg	4800
attaatctgg	tgtttattgt	tctgttcact	ggagaatgtg	tgctgaaact	gatctctctt	4860
cgttactact	atttcactat	tggatggaat	atttttgatt	ttgtgggtgg	cattctctcc	4920
attgtaggaa	tgtttctggc	tgaactgata	gaaaagtatt	ttgtgtcccc	taccctgttc	4980
cgagtgatcc	gtcttgccag	gattggccga	atcctacgtc	tgatcaaagg	agcaaagggg	5040
atccgcacgc	tgctctttgc	tttgatgatg	tccttcctg	cgttgtttta	catcggcctc	5100
cttcttttcc	tggtcatggt	catctacgcc	atctttggga	tgtccaattt	tgcttatggt	5160
aagaggggaag	ttgggatcga	tgacatgttc	aactttgaga	cctttggcaa	cagcatgatc	5220
tgctgttcc	aaattacaac	ctctgctggc	tgggatggat	tgctagcacc	tattcttaat	5280
agtggacctc	cagactgtga	ccctgacaaa	gatcacctg	gaagctcagt	taaaggagac	5340
tgtgggaacc	catctgttgg	gattttcttt	tttgtcagtt	acatcatcat	atccttcctg	5400
gttgtggtga	acatgtacat	cgcggtcatc	ctggagaact	tcagtgttgc	tactgaagaa	5460
agtgcagagc	ctctgagtga	ggatgacttt	gagatgttct	atgaggtttg	ggagaagttt	5520
gatcccgatg	cgaccaggtt	tatagagttt	gccaaacttt	ctgattttgc	agatgccctg	5580
gatcctctc	ttctcatagc	aaaaccaaac	aaagtccagc	tcattgccat	ggatctgccc	5640
atggtgagtg	gtgaccggat	ccactgtctt	gacatcttat	ttgcttttac	aaagcgtggt	5700
ttgggtgaga	gtggagagat	ggatgccctt	cgaatacaga	tggaagagcg	attcatggca	5760
tcaaaccct	caaagtctc	ttatgagccc	attacgacca	cgttgaaacg	caaacaagag	5820
gagggtgtctg	ctattattat	ccagagggct	tacagacgct	acctcttgaa	gcaaaaagtt	5880
aaaaagggtat	caagtatata	caagaaagac	aaaggcaaag	aatgtgatgg	aacaccctc	5940

aaagaagata ctctcattga taaactgaat gagaattcaa ctccagagaa aaccgatatg	6000
acgccttcca ccacgtctcc accctcgtat gatagtgtga ccaaaccaga aaaagaaaaa	6060
tttgaaaaag acaaatcaga aaaggaagac aaagggaaag atatcaggga aagtaaaaag	6120
taaaaagaaa ccaagaatth tccatthtgt gatcaattgt ttacagcccg tgatggtgat	6180
gtgtttgtgt caacaggact cccacaggag gtctatgcca aactgactgt ttttaciaat	6240
gtatacttaa ggtcagtgcc tataacaaga cagagacctc tggtcagcaa actggaactc	6300
agtaaaactgg agaaatagta tcgatgggag gtttctatth tcacaaccag ctgacactgc	6360
tgaagagcag aggcgtaatg gctactcaga cgataggaac caatthaaag gggggaggga	6420
agttaaathh ttatgtaaat tcaacatgtg acacttgata atagtaattg tcaccagtgt	6480
ttatgtthta actgccacac ctgccatath tttacaaaac gtgtgctgtg aatthtacc	6540
ttttctthth aatthacagg ttgtthtacta ttatatgtga ctatthttht aaatgggtth	6600
gtgtthtggg agagggtta aaggaggga attctacatt tctctattgt attgtataac	6660
tggatatath ttaaatggag gcatgctgca attctcattc acacataaaa aaatcacatc	6720
acaaaaggga agagthtact tcttgthtca ggatgtthth agatthtthga ggtgctthaa	6780
tagctattcg tatththtaag gtgtctcatc cagaaaaaat ttaatgtgcc tgtaaatgtt	6840
ccatagaatc acaagcatta aagagthgtt ttatththtacc ataaccatt aaatgtacat	6900
gtatatatgt atatatgtat atgtgctgt atatacatat atatgtatac acacatgcac	6960
acacagagat atacacatac cattacattg tcattcacag tcccagcagc atgactatca	7020
cattthtthgat aagtgtcctt tggcataaaa taaaaatatc ctatcagthc tttctaagaa	7080
gcctgaattg accaaaaaac atccccacca ccactthtata aagthgattc tgctthtacc	7140
tgcagtattg tttagccatc ttctgctctt ggtaaggthg acatagtata tgtcaattht	7200
aaaaataaaa gtctgctthg taaatagtaa ttttaccag tggthcatgt ttgagcaaac	7260
aaaaatgatg atttaagcac actactthatt gcatcaaata tgtaccacag taagtatagt	7320
ttgcaagctt tcaacaggta atatgatgta attggthtcca ttatagththg aagctgtcac	7380
tgctgcatgt ttatctthgcc tatgctgctg tatctthtacc ctthccactgt tcagaagtct	7440
aatatgggaa gccatatatc agtggttaaag tgaagcaaat tgtthtacca agacctcatt	7500
cttcatgtca ttaagcaata ggthgcagca aacaaggag agctthctthg tththtattct	7560
tccaacctta attgaacact caatgatgaa aagcccgact gtacaaacat gthgcaagct	7620
gctthaaatct gththaaaata tatggthtaga gththtctaag aaaaataaaa tactgtaaaa	7680

agttcatttt attttatttt tcagcctttt gtacgtaaaa tgagaaatta aaagtatctt	7740
caggtggatg tcacagtcac tattgttagt ttctgttcct agcactttta aattgaagca	7800
cttcacaaaa taagaagcaa ggactaggat gcagtgtagg tttctgcttt tttattagta	7860
ctgtaaactt gcacacattt caatgtgaaa caaatctcaa actgagttca atgtttattt	7920
gctttcaata gtaatgcctt atcattgaaa gaggcctaaa gaaaaaaaa atcagctgat	7980
actcttggca ttgcttgaat ccaatgtttc cacctagtct ttttattcag taatcatcag	8040
tcttttccaa tgtttgttta cacagataga tcttattgac ccatatggca ctagaactgt	8100
atcagatata atatgggatc ccagcttttt ttctctctcc acaaaaccag gtagtgaagt	8160
tatattacca gttacagcaa aatactttgt gtttcacaag caacaataaa tgtagattct	8220
ttatactgaa gctattgact tgtagtgtgt tgggtgaatgc atgcaggaag atgctgttac	8280
cataaagaac ggtaaaccac attacaatca agccaaagaa taaaggttcg cttatgtata	8340
tgtatttaa	8349

<210> 34
 <211> 8349
 <212> DNA
 <213> Homo sapiens

<400> 34	
ttcttggtgc cagcttatca atcccaaact ctgggtgtaa aagattctac agggcacttt	60
cttatgcaag gagctaaaca gtgattaaag gagcaggatg aaaagatggc acagtcagtg	120
ctgggtaccgc caggacctga cagcttcgc ttctttacca gggaatccct tgctgctatt	180
gaacaacgca ttgcagaaga gaaagctaag agacccaaac aggaacgcaa ggatgaggat	240
gatgaaaatg gcccaaagcc aaacagtgc ttggaagcag gaaaatctct tccatttatt	300
tatggagaca ttctccaga gatgggtgtca gtgcccctgg aggatctgga cccctactat	360
atcaataaga aaacgtttat agtattgaat aaagggaaag caatctctcg attcagtgcc	420
accctgccc ttacatttt aactcccttc aaccctatta gaaaattagc tattaagatt	480
ttggtacatt ctttattcaa tatgctcatt atgtgcacga ttcttacc aa ctgtgtattt	540
atgaccatga gtaaccctcc agactggaca aagaatgtgg agtatacctt tacaggaatt	600
tatacttttg aatcacttat taaaatactt gcaaggggct tttgtttaga agatttcaca	660
tttttacggg atccatggaa ttggttgat ttcacagtca ttacttttgc atatgtgaca	720
gagtttgtgg acctgggcaa tgtctcagcg ttgagaacat tcagagttct ccgagcattg	780

aaaacaattt	cagtcattcc	aggcctgaag	accattgtgg	gggccctgat	ccagtcagtg	840
aagaagcttt	ctgatgtcat	gatcttgact	gtgttctgtc	taagcgtgtt	tgcgctaata	900
ggattgcagt	tgttcatggg	caacctacga	aataaatgtt	tgcaatggcc	tccagataat	960
tcttcctttg	aaataaatat	cacttccttc	tttaacaatt	cattggatgg	gaatggtact	1020
actttcaata	ggacagtgag	catatttaac	tgggatgaat	atattgagga	taaaagtcac	1080
ttttatTTTT	tagaggggca	aaatgatgct	ctgctttgtg	gcaacagctc	agatgcaggc	1140
cagtgtcctg	aaggatacat	ctgtgtgaag	gctggtagaa	accccaacta	tggctacacg	1200
agctttgaca	cctttagtgt	ggcctttttg	tccttatttc	gtctcatgac	tcaagacttc	1260
tgggaaaacc	tttatcaact	gacactacgt	gctgctggga	aaacgtacat	gatatttttt	1320
gtgctggtca	ttttcttggg	ctcattctat	ctaataaatt	tgatcttggc	tgtggtggcc	1380
atggcctatg	aggaacagaa	tcaggccaca	ttggaagagg	ctgaacagaa	ggaagctgaa	1440
tttcagcaga	tgctcgaaca	gttgaaaaag	caacaagaag	aagctcaggc	ggcagctgca	1500
gccgcatctg	ctgaatcaag	agacttcagt	ggtgctggtg	ggataggagt	tttttcagag	1560
agttcttcag	tagcatctaa	gttgagctcc	aaaagtgaaa	aagagctgaa	aaacagaaga	1620
aagaaaaaga	aacagaaaaga	acagtctgga	gaagaagaga	aaaatgacag	agtcctaaaa	1680
tcggaatctg	aagacagcat	aagaagaaaa	ggtttccggt	tttccttgga	aggaagtagg	1740
ctgacatatg	aaaagagatt	ttcttctcca	caccagtcct	tactgagcat	ccgtggctcc	1800
cttttctctc	caagacgcaa	cagtagggcg	agccttttca	gcttcagagg	tcgagcaaag	1860
gacattggct	ctgagaatga	ctttgctgat	gatgagcaca	gcacctttga	ggacaatgac	1920
agccgaagag	actctctggt	cgtgccgcac	agacatggag	aacggcgcca	cagcaatgtc	1980
agccaggcca	gccgtgcctc	cagggtgctc	cccatcctgc	ccatgaatgg	gaagatgcat	2040
agcgctgtgg	actgcaatgg	tgtggtctcc	ctggtcgggg	gcccttctac	cctcacatct	2100
gctgggcagc	tcctaccaga	gggcacaaact	actgaaacag	aaataagaaa	gagacggtcc	2160
agttcttatc	atgtttccat	ggatttattg	gaagatccta	catcaaggca	aagagcaatg	2220
agtatagcca	gtattttgac	caacaccatg	gaagaacttg	aagaatccag	acagaaatgc	2280
ccaccatgct	ggtataaatt	tgctaatatg	tgtttgattt	gggactgttg	taaaccatgg	2340
ttaaagggtga	aacaccttgt	caacctgggt	gtaatggacc	catttgttga	cctggccatc	2400
accatctgca	ttgtcttaaa	tacactcttc	atggctatgg	agcactatcc	catgacggag	2460

cagttcagca gtgtactgtc tgttggaac ctggtcttca cagggatctt cacagcagaa	2520
atgtttctca agataattgc catggatcca tattattact ttcaagaagg ctggaatatt	2580
tttgatggtt ttattgtgag ccttagttta atggaacttg gtttggcaaa tgtggaagga	2640
ttgtcagttc tccgatcatt ccggctgctc cgagttttca agttggcaaa atcttggcca	2700
actctaaata tgctaattaa gatcattggc aattctgtgg gggctctagg aaacctcacc	2760
ttggtattgg ccatcatcgt cttcattttt gctgtggctg gcatgcagct ctttggtaag	2820
agctacaaag aatgtgtctg caagatttcc aatgattgtg aactcccacg ctggcacatg	2880
catgactttt tccactcctt cctgatcgtg ttccgctgctc tgtgtggaga gtggatagag	2940
accatgtggg actgtatgga ggtcgctggc caaaccatgt gccttactgt cttcatgatg	3000
gtcatggtga ttggaaatct agtggttctg aacctcttct tggccttgct tttgagttcc	3060
ttcagttctg acaatcttgc tgccactgat gatgataacg aaatgaataa tctccagatt	3120
gctgtgggaa ggatgcagaa aggaatcgat tttgttaaaa gaaaaatacg tgaatttatt	3180
cagaaagcct ttgttaggaa gcagaaagct ttagatgaaa ttaaaccgct tgaagatcta	3240
aataataaaa aagacagctg tatttccaac cataccacca tagaaatagg caaagacctc	3300
aattatctca aagacggaaa tggaactact agtggcatag gcagcagtgt agaaaaatat	3360
gtcgtggatg aaagtgatta catgtcattt ataaacaacc ctagcctcac tgtgacagta	3420
ccaattgctg ttggagaatc tgactttgaa aatttaaata ctgaagaatt cagcagcgag	3480
tcagatatgg aggaaagcaa agagaagcta aatgcaacta gttcatctga aggcagcacg	3540
gttgatattg gagctcccg ctagggagaa cagcctgagg ttgaacctga ggaatccctt	3600
gaacctgaag cctgttttac agaagactgt gtacggaagt tcaagtgtg tcagataagc	3660
atagaagaag gcaaagggaa actctggtgg aatttgagga aaacatgcta taagatagtg	3720
gagcacaatt gggtcgaaac cttcattgtc ttcattgattc tgctgagcag tggggctctg	3780
gcctttgaag atatatacat tgagcagcga aaaaccatta agaccatgtt agaatatgct	3840
gacaagggtt tcacttacat attcattctg gaaatgctgc taaagtgggt tgcatatggt	3900
tttcaagtgt attttacc aa tgccctggtgc tggctagact tcctgattgt tgatgtctca	3960
ctggttagct taactgcaaa tgccctgggt tactcagaac ttggtgccat caaatccctc	4020
agaacactaa gagctctgag gccactgaga gctttgtccc ggtttgaagg aatgagggct	4080
gttgtaaatg ctcttttagg agccattcca tctatcatga atgtacttct ggtttgtctg	4140
atcttttggc taatattcag tatcatggga gtgaatctct ttgctggcaa gttttaccat	4200

tgtattaatt acaccactgg agagatgttt gatgtaagcg tggtaacaa ctacagtgg	4260
tgcaaagctc tcattgagag caatcaaact gccagggtgga aaaatgtgaa agtaaaacttt	4320
gataacgtag gacttggata tctgtctcta cttcaagtag ccacgtttta gggatggatg	4380
gatattatgt atgcagctgt tgattcacga aatgtagaat tacaaccaa gtatgaagac	4440
aacctgtaca tgtatcttta ttttgtcatc tttattattt ttggttcatt ctttaccttg	4500
aatcttttca ttgggtgcat catagataac ttcaaccaac agaaaaagaa gtttggaggt	4560
caagacattt ttatgacaga agaacagaag aaatactaca atgcaatgaa aaaactgggt	4620
tcaaagaaac cacaaaaacc catacctcga cctgctaaca aattccaagg aatggtcttt	4680
gattttgtaa ccaaacaagt ctttgatata agcatcatga tcctcatctg ccttaacatg	4740
gtcaccatga tgggtggaaac cgatgaccag agtcaagaaa tgacaaacat tctgtactgg	4800
attaatctgg tgtttattgt tctgttcact ggagaatgtg tgctgaaact gatctctctt	4860
cgttactact atttcactat tggatggaat atttttgatt ttgtggtggt cattctctcc	4920
attgtaggaa tgtttctggc tgaactgata gaaaagtatt ttgtgtcccc taccctgttc	4980
cgagtgatcc gtcttgccag gattggccga atcctacgtc tgatcaaagg agcaaagggg	5040
atccgcacgc tgctctttgc tttgatgatg tcccttcctg cgttgtttta catcggcctc	5100
cttcttttcc tggatcatgt catctacgcc atctttggga tgtccaattt tgcctatgtt	5160
aagaggggaag ttgggatcga tgacatgttc aactttgaga cctttggcaa cagcatgatc	5220
tgcctgttcc aaattacaac ctctgctggc tgggatggat tgctagcacc tattcttaat	5280
agtggacctc cagactgtga ccctgacaaa gatcaccctg gaagctcagt taaaggagac	5340
tgtgggaacc catctgttgg gattttcttt tttgtcagtt acatcatcat atccttcctg	5400
gttgtggtga acatgtacat cgcggtcatc ctggagaact tcagtgttgc tactgaagaa	5460
agtgcagagc ctctgagtga ggatgacttt gagatgttct atgaggtttg ggagaagttt	5520
gatcccgatg cgaccagtt tatagagttt gccaaacttt ctgattttgc agatgccctg	5580
gatcctctc ttctcatagc aaaaccaaac aaagtccagc tcattgccat ggatctgccc	5640
atggtgagtg gtgaccggat ccactgtctt gacatcttat ttgcttttac aaagcgtgtt	5700
ttgggtgaga gtggagagat ggatgccctt cgaatacaga tggaagagcg attcatggca	5760
tcaaaccct ccaaagtctc ttatgagccc attacgacca cgttgaaacg caaacaagag	5820
gaggtgtctg ctattattat ccagagggt tacagacgct acctcttgaa gcaaaaagtt	5880

aaaaaggtat caagtatata caagaaagac aaaggcaaag aatgtgatgg aacacccatc	5940
aaagaagata ctctcattga taaactgaat gagaattcaa ctccagagaa aaccgatatg	6000
acgccttcca ccacgtctcc accctcgtat gatagtgtga ccaaaccaga aaaagaaaaa	6060
tttgaaaaag acaaatcaga aaaggaagac aaagggaaaag atatcaggga aagtaaaaag	6120
taaaaagaaa ccaagaattht tccatthttgt gatcaattgt ttacagcccg tgatgggtgat	6180
gtgttttgtgt caacaggact cccacaggag gtctatgcc aactgactgt ttttaciaat	6240
gtatacttaa ggtcagtgcc tataaciaa cagagacctc tggtcagcaa actggaactc	6300
agtaaaactgg agaaatagta tcgatgggag gtttctattht tcacaaccag ctgacactgc	6360
tgaagagcag aggcgtaatg gctactcaga cgataggaac caatthaaag gggggaggga	6420
agttaaatht ttatgtaaat tcaacatgtg acacttgata atagtaattg tcaccagtgt	6480
ttatgtthta actgccacac ctgccatatt tttacaaaac gtgtgctgtg aatthtatcac	6540
ttttctthtt aatthcacagg ttgtthtacta ttatatgtga ctatthttgt aaatgggttht	6600
gtgtthtggg agagggatta aaggggaggga attctacatt tctctattgt attgtataac	6660
tggatatatt ttaaatggag gcatgctgca attctcattc acacataaaa aaatcacatc	6720
acaaaaggga agagtthtact tcttgthttca ggatgtthtt agatthttga ggtgcttaaa	6780
tagctattcg tatthtttaag gtgtctcatc cagaaaaaat ttaatgtgcc tgtaaatgtt	6840
ccatagaatc acaagcatta aagagtthgt ttatthttac ataaccatt aaatgtacat	6900
gtatatatgt atatatgtat atgtgctgt atatacatat atatgtatac acacatgcac	6960
acacagagat atacacatac cattacattg tcattcacag tcccagcagc atgactatca	7020
cattthttgat aagtgtcctt tggcataaaa taaaaatatc ctatcagtcc tttctaagaa	7080
gcctgaattg accaaaaaac atccccacca ccactthata aagttgattc tgctthtatcc	7140
tgcagtattg tttagccatc ttctgctctt ggtaagggtg acatagtata tgtcaattht	7200
aaaaataaaa gtctgcttht taaatagtaa ttttaccag tggtgcatgt ttgagcaaac	7260
aaaaatgatg atttaagcac actactthatt gcatcaaata tgtaccacag taagtatagt	7320
ttgcaagctt tcaacaggta atatgatgta attggthcca ttatagthtg aagctgtcac	7380
tgctgcatgt ttatctthgcc tatgctgctg tatctthattc cttccactgt tcagaagtct	7440
aatatgggaa gccatatatc agtggtaaaag tgaagcaaat tgttctacca agacctcatt	7500
cttcatgtca ttaagcaata ggttgacgca aacaaggag agcttctthg tttthattct	7560
tccaacctta attgaacact caatgatgaa aagcccagct gtacaaacat gttgcaagct	7620

gcttaaactct gtttaaaata tatgggttaga gttttctaag aaaatataaa tactgtaaaa 7680
 agttcattttt attttatttt tcagcctttt gtacgtaaaa tgagaaatta aaagtatctt 7740
 caggtggatg tcacagtcac tattgttagt ttctgttcct agcactttta aattgaagca 7800
 cttcacaaaa taagaagcaa ggactaggat gcagtgtagg tttctgcttt tttattagta 7860
 ctgtaaactt gcacacattt caatgtgaaa caaatctcaa actgagttca atgtttattt 7920
 gctttcaata gtaatgcctt atcattgaaa gaggcctaaa gaaaaaaaaa atcagctgat 7980
 actcttgga ttgcttgaat ccaatgtttc cacctagtct ttttattcag taatcatcag 8040
 tctttttcaa tgtttgttta cacagataga tcttattgac ccatatggca ctagaactgt 8100
 atcagatata atatgggatc ccagcttttt ttctctccc acaaaaccag gtagtgaagt 8160
 tatattacca gttacagcaa aatactttgt gtttcacaag caacaataaa ttagattctt 8220
 ttatactgaa gctattgact ttagtggtgt tggatgaatgc atgcaggaag atgctgttac 8280
 cataaagaac ggtaaaccac attacaatca agccaaagaa taaaggttcg cttatgtata 8340
 tgtatttaa 8349

<210> 35
 <211> 2005
 <212> PRT
 <213> Homo sapiens

<400> 35

Met Ala Gln Ser Val Leu Val Pro Pro Gly Pro Asp Ser Phe Arg Phe
 1 5 10 15

Phe Thr Arg Glu Ser Leu Ala Ala Ile Glu Gln Arg Ile Ala Glu Glu
 20 25 30

Lys Ala Lys Arg Pro Lys Gln Glu Arg Lys Asp Glu Asp Asp Glu Asn
 35 40 45

Gly Pro Lys Pro Asn Ser Asp Leu Glu Ala Gly Lys Ser Leu Pro Phe
 50 55 60

Ile Tyr Gly Asp Ile Pro Pro Glu Met Val Ser Val Pro Leu Glu Asp
 65 70 75 80

Leu Asp Pro Tyr Tyr Ile Asn Lys Lys Thr Phe Ile Val Leu Asn Lys
 85 90 95

Gly Lys Ala Ile Ser Arg Phe Ser Ala Thr Pro Ala Leu Tyr Ile Leu
100 105 110

Thr Pro Phe Asn Pro Ile Arg Lys Leu Ala Ile Lys Ile Leu Val His
115 120 125

Ser Leu Phe Asn Met Leu Ile Met Cys Thr Ile Leu Thr Asn Cys Val
130 135 140

Phe Met Thr Met Ser Asn Pro Pro Asp Trp Thr Lys Asn Val Glu Tyr
145 150 155 160

Thr Phe Thr Gly Ile Tyr Thr Phe Glu Ser Leu Ile Lys Ile Leu Ala
165 170 175

Arg Gly Phe Cys Leu Glu Asp Phe Thr Phe Leu Arg Asp Pro Trp Asn
180 185 190

Trp Leu Asp Phe Thr Val Ile Thr Phe Ala Tyr Val Thr Glu Phe Val
195 200 205

Asp Leu Gly Asn Val Ser Ala Leu Arg Thr Phe Arg Val Leu Arg Ala
210 215 220

Leu Lys Thr Ile Ser Val Ile Pro Gly Leu Lys Thr Ile Val Gly Ala
225 230 235 240

Leu Ile Gln Ser Val Lys Lys Leu Ser Asp Val Met Ile Leu Thr Val
245 250 255

Phe Cys Leu Ser Val Phe Ala Leu Ile Gly Leu Gln Leu Phe Met Gly
260 265 270

Asn Leu Arg Asn Lys Cys Leu Gln Trp Pro Pro Asp Asn Ser Ser Phe
275 280 285

Glu Ile Asn Ile Thr Ser Phe Phe Asn Asn Ser Leu Asp Gly Asn Gly
290 295 300

Thr Thr Phe Asn Arg Thr Val Ser Ile Phe Asn Trp Asp Glu Tyr Ile
305 310 315 320

Glu Asp Lys Ser His Phe Tyr Phe Leu Glu Gly Gln Asn Asp Ala Leu
325 330 335

Leu Cys Gly Asn Ser Ser Asp Ala Gly Gln Cys Pro Glu Gly Tyr Ile
340 345 350

Cys Val Lys Ala Gly Arg Asn Pro Asn Tyr Gly Tyr Thr Ser Phe Asp
355 360 365

Thr Phe Ser Trp Ala Phe Leu Ser Leu Phe Arg Leu Met Thr Gln Asp
370 375 380

Phe Trp Glu Asn Leu Tyr Gln Leu Thr Leu Arg Ala Ala Gly Lys Thr
385 390 395 400

Tyr Met Ile Phe Phe Val Leu Val Ile Phe Leu Gly Ser Phe Tyr Leu
405 410 415

Ile Asn Leu Ile Leu Ala Val Val Ala Met Ala Tyr Glu Glu Gln Asn
420 425 430

Gln Ala Thr Leu Glu Glu Ala Glu Gln Lys Glu Ala Glu Phe Gln Gln
435 440 445

Met Leu Glu Gln Leu Lys Lys Gln Gln Glu Glu Ala Gln Ala Ala Ala
450 455 460

Ala Ala Ala Ser Ala Glu Ser Arg Asp Phe Ser Gly Ala Gly Gly Ile
465 470 475 480

Gly Val Phe Ser Glu Ser Ser Ser Val Ala Ser Lys Leu Ser Ser Lys
485 490 495

Ser Glu Lys Glu Leu Lys Asn Arg Arg Lys Lys Lys Lys Gln Lys Glu
500 505 510

Gln Ser Gly Glu Glu Glu Lys Asn Asp Arg Val Leu Lys Ser Glu Ser
515 520 525

Glu Asp Ser Ile Arg Arg Lys Gly Phe Arg Phe Ser Leu Glu Gly Ser
530 535 540

Arg Leu Thr Tyr Glu Lys Arg Phe Ser Ser Pro His Gln Ser Leu Leu
545 550 555 560

Ser Ile Arg Gly Ser Leu Phe Ser Pro Arg Arg Asn Ser Arg Ala Ser
565 570 575

Leu Phe Ser Phe Arg Gly Arg Ala Lys Asp Ile Gly Ser Glu Asn Asp
580 585 590

Phe Ala Asp Asp Glu His Ser Thr Phe Glu Asp Asn Asp Ser Arg Arg
595 600 605

Asp Ser Leu Phe Val Pro His Arg His Gly Glu Arg Arg His Ser Asn
610 615 620

Val Ser Gln Ala Ser Arg Ala Ser Arg Val Leu Pro Ile Leu Pro Met
625 630 635 640

Asn Gly Lys Met His Ser Ala Val Asp Cys Asn Gly Val Val Ser Leu
645 650 655

Val Gly Gly Pro Ser Thr Leu Thr Ser Ala Gly Gln Leu Leu Pro Glu
660 665 670

Gly Thr Thr Thr Glu Thr Glu Ile Arg Lys Arg Arg Ser Ser Ser Tyr
675 680 685

His Val Ser Met Asp Leu Leu Glu Asp Pro Thr Ser Arg Gln Arg Ala
690 695 700

Met Ser Ile Ala Ser Ile Leu Thr Asn Thr Met Glu Glu Leu Glu Glu
705 710 715 720

Ser Arg Gln Lys Cys Pro Pro Cys Trp Tyr Lys Phe Ala Asn Met Cys
725 730 735

Leu Ile Trp Asp Cys Cys Lys Pro Trp Leu Lys Val Lys His Leu Val
740 745 750

Asn Leu Val Val Met Asp Pro Phe Val Asp Leu Ala Ile Thr Ile Cys
755 760 765

Ile Val Leu Asn Thr Leu Phe Met Ala Met Glu His Tyr Pro Met Thr

770

775

780

Glu Gln Phe Ser Ser Val Leu Ser Val Gly Asn Leu Val Phe Thr Gly
 785 790 795 800

Ile Phe Thr Ala Glu Met Phe Leu Lys Ile Ile Ala Met Asp Pro Tyr
 805 810 815

Tyr Tyr Phe Gln Glu Gly Trp Asn Ile Phe Asp Gly Phe Ile Val Ser
 820 825 830

Leu Ser Leu Met Glu Leu Gly Leu Ala Asn Val Glu Gly Leu Ser Val
 835 840 845

Leu Arg Ser Phe Arg Leu Leu Arg Val Phe Lys Leu Ala Lys Ser Trp
 850 855 860

Pro Thr Leu Asn Met Leu Ile Lys Ile Ile Gly Asn Ser Val Gly Ala
 865 870 875 880

Leu Gly Asn Leu Thr Leu Val Leu Ala Ile Ile Val Phe Ile Phe Ala
 885 890 895

Val Val Gly Met Gln Leu Phe Gly Lys Ser Tyr Lys Glu Cys Val Cys
 900 905 910

Lys Ile Ser Asn Asp Cys Glu Leu Pro Arg Trp His Met His Asp Phe
 915 920 925

Phe His Ser Phe Leu Ile Val Phe Arg Val Leu Cys Gly Glu Trp Ile
 930 935 940

Glu Thr Met Trp Asp Cys Met Glu Val Ala Gly Gln Thr Met Cys Leu
 945 950 955 960

Thr Val Phe Met Met Val Met Val Ile Gly Asn Leu Val Val Leu Asn
 965 970 975

Leu Phe Leu Ala Leu Leu Leu Ser Ser Phe Ser Ser Asp Asn Leu Ala
 980 985 990

Ala Thr Asp Asp Asp Asn Glu Met Asn Asn Leu Gln Ile Ala Val Gly
 995 1000 1005

Arg Met Gln Lys Gly Ile Asp Phe Val Lys Arg Lys Ile Arg Glu
1010 1015 1020

Phe Ile Gln Lys Ala Phe Val Arg Lys Gln Lys Ala Leu Asp Glu
1025 1030 1035

Ile Lys Pro Leu Glu Asp Leu Asn Asn Lys Lys Asp Ser Cys Ile
1040 1045 1050

Ser Asn His Thr Thr Ile Glu Ile Gly Lys Asp Leu Asn Tyr Leu
1055 1060 1065

Lys Asp Gly Asn Gly Thr Thr Ser Gly Ile Gly Ser Ser Val Glu
1070 1075 1080

Lys Tyr Val Val Asp Glu Ser Asp Tyr Met Ser Phe Ile Asn Asn
1085 1090 1095

Pro Ser Leu Thr Val Thr Val Pro Ile Ala Val Gly Glu Ser Asp
1100 1105 1110

Phe Glu Asn Leu Asn Thr Glu Glu Phe Ser Ser Glu Ser Asp Met
1115 1120 1125

Glu Glu Ser Lys Glu Lys Leu Asn Ala Thr Ser Ser Ser Glu Gly
1130 1135 1140

Ser Thr Val Asp Ile Gly Ala Pro Ala Glu Gly Glu Gln Pro Glu
1145 1150 1155

Val Glu Pro Glu Glu Ser Leu Glu Pro Glu Ala Cys Phe Thr Glu
1160 1165 1170

Asp Cys Val Arg Lys Phe Lys Cys Cys Gln Ile Ser Ile Glu Glu
1175 1180 1185

Gly Lys Gly Lys Leu Trp Trp Asn Leu Arg Lys Thr Cys Tyr Lys
1190 1195 1200

Ile Val Glu His Asn Trp Phe Glu Thr Phe Ile Val Phe Met Ile
1205 1210 1215

Leu Leu Ser Ser Gly Ala Leu Ala Phe Glu Asp Ile Tyr Ile Glu
1220 1225 1230

Gln Arg Lys Thr Ile Lys Thr Met Leu Glu Tyr Ala Asp Lys Val
1235 1240 1245

Phe Thr Tyr Ile Phe Ile Leu Glu Met Leu Leu Lys Trp Val Ala
1250 1255 1260

Tyr Gly Phe Gln Val Tyr Phe Thr Asn Ala Trp Cys Trp Leu Asp
1265 1270 1275

Phe Leu Ile Val Asp Val Ser Leu Val Ser Leu Thr Ala Asn Ala
1280 1285 1290

Leu Gly Tyr Ser Glu Leu Gly Ala Ile Lys Ser Leu Arg Thr Leu
1295 1300 1305

Arg Ala Leu Arg Pro Leu Arg Ala Leu Ser Arg Phe Glu Gly Met
1310 1315 1320

Arg Ala Val Val Asn Ala Leu Leu Gly Ala Ile Pro Ser Ile Met
1325 1330 1335

Asn Val Leu Leu Val Cys Leu Ile Phe Trp Leu Ile Phe Ser Ile
1340 1345 1350

Met Gly Val Asn Leu Phe Ala Gly Lys Phe Tyr His Cys Ile Asn
1355 1360 1365

Tyr Thr Thr Gly Glu Met Phe Asp Val Ser Val Val Asn Asn Tyr
1370 1375 1380

Ser Glu Cys Lys Ala Leu Ile Glu Ser Asn Gln Thr Ala Arg Trp
1385 1390 1395

Lys Asn Val Lys Val Asn Phe Asp Asn Val Gly Leu Gly Tyr Leu
1400 1405 1410

Ser Leu Leu Gln Val Ala Thr Phe Lys Gly Trp Met Asp Ile Met
1415 1420 1425

Tyr Ala Ala Val Asp Ser Arg Asn Val Glu Leu Gln Pro Lys Tyr
1430 1435 1440

Glu Asp Asn Leu Tyr Met Tyr Leu Tyr Phe Val Ile Phe Ile Ile
1445 1450 1455

Phe Gly Ser Phe Phe Thr Leu Asn Leu Phe Ile Gly Val Ile Ile
1460 1465 1470

Asp Asn Phe Asn Gln Gln Lys Lys Lys Phe Gly Gly Gln Asp Ile
1475 1480 1485

Phe Met Thr Glu Glu Gln Lys Lys Tyr Tyr Asn Ala Met Lys Lys
1490 1495 1500

Leu Gly Ser Lys Lys Pro Gln Lys Pro Ile Pro Arg Pro Ala Asn
1505 1510 1515

Lys Phe Gln Gly Met Val Phe Asp Phe Val Thr Lys Gln Val Phe
1520 1525 1530

Asp Ile Ser Ile Met Ile Leu Ile Cys Leu Asn Met Val Thr Met
1535 1540 1545

Met Val Glu Thr Asp Asp Gln Ser Gln Glu Met Thr Asn Ile Leu
1550 1555 1560

Tyr Trp Ile Asn Leu Val Phe Ile Val Leu Phe Thr Gly Glu Cys
1565 1570 1575

Val Leu Lys Leu Ile Ser Leu Arg Tyr Tyr Tyr Phe Thr Ile Gly
1580 1585 1590

Trp Asn Ile Phe Asp Phe Val Val Val Ile Leu Ser Ile Val Gly
1595 1600 1605

Met Phe Leu Ala Glu Leu Ile Glu Lys Tyr Phe Val Ser Pro Thr
1610 1615 1620

Leu Phe Arg Val Ile Arg Leu Ala Arg Ile Gly Arg Ile Leu Arg
1625 1630 1635

Leu Ile Lys Gly Ala Lys Gly Ile Arg Thr Leu Leu Phe Ala Leu

1640		1645		1650
Met Met	Ser Leu Pro Ala	Leu Phe Asn Ile Gly	Leu Leu Leu Phe	
1655		1660	1665	
Leu Val	Met Phe Ile Tyr Ala	Ile Phe Gly Met Ser	Asn Phe Ala	
1670		1675	1680	
Tyr Val	Lys Arg Glu Val Gly	Ile Asp Asp Met Phe	Asn Phe Glu	
1685		1690	1695	
Thr Phe	Gly Asn Ser Met Ile	Cys Leu Phe Gln Ile	Thr Thr Ser	
1700		1705	1710	
Ala Gly	Trp Asp Gly Leu Leu	Ala Pro Ile Leu Asn	Ser Gly Pro	
1715		1720	1725	
Pro Asp	Cys Asp Pro Asp Lys	Asp His Pro Gly Ser	Ser Val Lys	
1730		1735	1740	
Gly Asp	Cys Gly Asn Pro Ser	Val Gly Ile Phe Phe	Phe Val Ser	
1745		1750	1755	
Tyr Ile	Ile Ile Ser Phe Leu	Val Val Val Asn Met	Tyr Ile Ala	
1760		1765	1770	
Val Ile	Leu Glu Asn Phe Ser	Val Ala Thr Glu Glu	Ser Ala Glu	
1775		1780	1785	
Pro Leu	Ser Glu Asp Asp Phe	Glu Met Phe Tyr Glu	Val Trp Glu	
1790		1795	1800	
Lys Phe	Asp Pro Asp Ala Thr	Gln Phe Ile Glu Phe	Ala Lys Leu	
1805		1810	1815	
Ser Asp	Phe Ala Asp Ala Leu	Asp Pro Pro Leu Leu	Ile Ala Lys	
1820		1825	1830	
Pro Asn	Lys Val Gln Leu Ile	Ala Met Asp Leu Pro	Met Val Ser	
1835		1840	1845	
Gly Asp	Arg Ile His Cys Leu	Asp Ile Leu Phe Ala	Phe Thr Lys	
1850		1855	1860	

Arg Val Leu Gly Glu Ser Gly Glu Met Asp Ala Leu Arg Ile Gln
1865 1870 1875

Met Glu Glu Arg Phe Met Ala Ser Asn Pro Ser Lys Val Ser Tyr
1880 1885 1890

Glu Pro Ile Thr Thr Thr Leu Lys Arg Lys Gln Glu Glu Val Ser
1895 1900 1905

Ala Ile Ile Ile Gln Arg Ala Tyr Arg Arg Tyr Leu Leu Lys Gln
1910 1915 1920

Lys Val Lys Lys Val Ser Ser Ile Tyr Lys Lys Asp Lys Gly Lys
1925 1930 1935

Glu Cys Asp Gly Thr Pro Ile Lys Glu Asp Thr Leu Ile Asp Lys
1940 1945 1950

Leu Asn Glu Asn Ser Thr Pro Glu Lys Thr Asp Met Thr Pro Ser
1955 1960 1965

Thr Thr Ser Pro Pro Ser Tyr Asp Ser Val Thr Lys Pro Glu Lys
1970 1975 1980

Glu Lys Phe Glu Lys Asp Lys Ser Glu Lys Glu Asp Lys Gly Lys
1985 1990 1995

Asp Ile Arg Glu Ser Lys Lys
2000 2005

<210> 36
<211> 2005
<212> PRT
<213> Homo sapiens

<400> 36

Met Ala Gln Ser Val Leu Val Pro Pro Gly Pro Asp Ser Phe Arg Phe
1 5 10 15

Phe Thr Arg Glu Ser Leu Ala Ala Ile Glu Gln Arg Ile Ala Glu Glu
20 25 30

Lys Ala Lys Arg Pro Lys Gln Glu Arg Lys Asp Glu Asp Asp Glu Asn
35 40 45

Gly Pro Lys Pro Asn Ser Asp Leu Glu Ala Gly Lys Ser Leu Pro Phe
50 55 60

Ile Tyr Gly Asp Ile Pro Pro Glu Met Val Ser Val Pro Leu Glu Asp
65 70 75 80

Leu Asp Pro Tyr Tyr Ile Asn Lys Lys Thr Phe Ile Val Leu Asn Lys
85 90 95

Gly Lys Ala Ile Ser Arg Phe Ser Ala Thr Pro Ala Leu Tyr Ile Leu
100 105 110

Thr Pro Phe Asn Pro Ile Arg Lys Leu Ala Ile Lys Ile Leu Val His
115 120 125

Ser Leu Phe Asn Met Leu Ile Met Cys Thr Ile Leu Thr Asn Cys Val
130 135 140

Phe Met Thr Met Ser Asn Pro Pro Asp Trp Thr Lys Asn Val Glu Tyr
145 150 155 160

Thr Phe Thr Gly Ile Tyr Thr Phe Glu Ser Leu Ile Lys Ile Leu Ala
165 170 175

Arg Gly Phe Cys Leu Glu Asp Phe Thr Phe Leu Arg Asp Pro Trp Asn
180 185 190

Trp Leu Asp Phe Thr Val Ile Thr Phe Ala Tyr Val Thr Glu Phe Val
195 200 205

Asn Leu Gly Asn Val Ser Ala Leu Arg Thr Phe Arg Val Leu Arg Ala
210 215 220

Leu Lys Thr Ile Ser Val Ile Pro Gly Leu Lys Thr Ile Val Gly Ala
225 230 235 240

Leu Ile Gln Ser Val Lys Lys Leu Ser Asp Val Met Ile Leu Thr Val
245 250 255

Phe Cys Leu Ser Val Phe Ala Leu Ile Gly Leu Gln Leu Phe Met Gly

260

265

270

Asn Leu Arg Asn Lys Cys Leu Gln Trp Pro Pro Asp Asn Ser Ser Phe
 275 280 285

Glu Ile Asn Ile Thr Ser Phe Phe Asn Asn Ser Leu Asp Gly Asn Gly
 290 295 300

Thr Thr Phe Asn Arg Thr Val Ser Ile Phe Asn Trp Asp Glu Tyr Ile
 305 310 315 320

Glu Asp Lys Ser His Phe Tyr Phe Leu Glu Gly Gln Asn Asp Ala Leu
 325 330 335

Leu Cys Gly Asn Ser Ser Asp Ala Gly Gln Cys Pro Glu Gly Tyr Ile
 340 345 350

Cys Val Lys Ala Gly Arg Asn Pro Asn Tyr Gly Tyr Thr Ser Phe Asp
 355 360 365

Thr Phe Ser Trp Ala Phe Leu Ser Leu Phe Arg Leu Met Thr Gln Asp
 370 375 380

Phe Trp Glu Asn Leu Tyr Gln Leu Thr Leu Arg Ala Ala Gly Lys Thr
 385 390 395 400

Tyr Met Ile Phe Phe Val Leu Val Ile Phe Leu Gly Ser Phe Tyr Leu
 405 410 415

Ile Asn Leu Ile Leu Ala Val Val Ala Met Ala Tyr Glu Glu Gln Asn
 420 425 430

Gln Ala Thr Leu Glu Glu Ala Glu Gln Lys Glu Ala Glu Phe Gln Gln
 435 440 445

Met Leu Glu Gln Leu Lys Lys Gln Gln Glu Glu Ala Gln Ala Ala Ala
 450 455 460

Ala Ala Ala Ser Ala Glu Ser Arg Asp Phe Ser Gly Ala Gly Gly Ile
 465 470 475 480

Gly Val Phe Ser Glu Ser Ser Ser Val Ala Ser Lys Leu Ser Ser Lys
 485 490 495

Ser Glu Lys Glu Leu Lys Asn Arg Arg Lys Lys Lys Lys Gln Lys Glu
500 505 510

Gln Ser Gly Glu Glu Glu Lys Asn Asp Arg Val Leu Lys Ser Glu Ser
515 520 525

Glu Asp Ser Ile Arg Arg Lys Gly Phe Arg Phe Ser Leu Glu Gly Ser
530 535 540

Arg Leu Thr Tyr Glu Lys Arg Phe Ser Ser Pro His Gln Ser Leu Leu
545 550 555 560

Ser Ile Arg Gly Ser Leu Phe Ser Pro Arg Arg Asn Ser Arg Ala Ser
565 570 575

Leu Phe Ser Phe Arg Gly Arg Ala Lys Asp Ile Gly Ser Glu Asn Asp
580 585 590

Phe Ala Asp Asp Glu His Ser Thr Phe Glu Asp Asn Asp Ser Arg Arg
595 600 605

Asp Ser Leu Phe Val Pro His Arg His Gly Glu Arg Arg His Ser Asn
610 615 620

Val Ser Gln Ala Ser Arg Ala Ser Arg Val Leu Pro Ile Leu Pro Met
625 630 635 640

Asn Gly Lys Met His Ser Ala Val Asp Cys Asn Gly Val Val Ser Leu
645 650 655

Val Gly Gly Pro Ser Thr Leu Thr Ser Ala Gly Gln Leu Leu Pro Glu
660 665 670

Gly Thr Thr Thr Glu Thr Glu Ile Arg Lys Arg Arg Ser Ser Ser Tyr
675 680 685

His Val Ser Met Asp Leu Leu Glu Asp Pro Thr Ser Arg Gln Arg Ala
690 695 700

Met Ser Ile Ala Ser Ile Leu Thr Asn Thr Met Glu Glu Leu Glu Glu
705 710 715 720

Ser Arg Gln Lys Cys Pro Pro Cys Trp Tyr Lys Phe Ala Asn Met Cys
725 730 735

Leu Ile Trp Asp Cys Cys Lys Pro Trp Leu Lys Val Lys His Leu Val
740 745 750

Asn Leu Val Val Met Asp Pro Phe Val Asp Leu Ala Ile Thr Ile Cys
755 760 765

Ile Val Leu Asn Thr Leu Phe Met Ala Met Glu His Tyr Pro Met Thr
770 775 780

Glu Gln Phe Ser Ser Val Leu Ser Val Gly Asn Leu Val Phe Thr Gly
785 790 795 800

Ile Phe Thr Ala Glu Met Phe Leu Lys Ile Ile Ala Met Asp Pro Tyr
805 810 815

Tyr Tyr Phe Gln Glu Gly Trp Asn Ile Phe Asp Gly Phe Ile Val Ser
820 825 830

Leu Ser Leu Met Glu Leu Gly Leu Ala Asn Val Glu Gly Leu Ser Val
835 840 845

Leu Arg Ser Phe Arg Leu Leu Arg Val Phe Lys Leu Ala Lys Ser Trp
850 855 860

Pro Thr Leu Asn Met Leu Ile Lys Ile Ile Gly Asn Ser Val Gly Ala
865 870 875 880

Leu Gly Asn Leu Thr Leu Val Leu Ala Ile Ile Val Phe Ile Phe Ala
885 890 895

Val Val Gly Met Gln Leu Phe Gly Lys Ser Tyr Lys Glu Cys Val Cys
900 905 910

Lys Ile Ser Asn Asp Cys Glu Leu Pro Arg Trp His Met His Asp Phe
915 920 925

Phe His Ser Phe Leu Ile Val Phe Arg Val Leu Cys Gly Glu Trp Ile
930 935 940

Glu Thr Met Trp Asp Cys Met Glu Val Ala Gly Gln Thr Met Cys Leu
945 950 955 960

Thr Val Phe Met Met Val Met Val Ile Gly Asn Leu Val Val Leu Asn
965 970 975

Leu Phe Leu Ala Leu Leu Leu Ser Ser Phe Ser Ser Asp Asn Leu Ala
980 985 990

Ala Thr Asp Asp Asp Asn Glu Met Asn Asn Leu Gln Ile Ala Val Gly
995 1000 1005

Arg Met Gln Lys Gly Ile Asp Phe Val Lys Arg Lys Ile Arg Glu
1010 1015 1020

Phe Ile Gln Lys Ala Phe Val Arg Lys Gln Lys Ala Leu Asp Glu
1025 1030 1035

Ile Lys Pro Leu Glu Asp Leu Asn Asn Lys Lys Asp Ser Cys Ile
1040 1045 1050

Ser Asn His Thr Thr Ile Glu Ile Gly Lys Asp Leu Asn Tyr Leu
1055 1060 1065

Lys Asp Gly Asn Gly Thr Thr Ser Gly Ile Gly Ser Ser Val Glu
1070 1075 1080

Lys Tyr Val Val Asp Glu Ser Asp Tyr Met Ser Phe Ile Asn Asn
1085 1090 1095

Pro Ser Leu Thr Val Thr Val Pro Ile Ala Val Gly Glu Ser Asp
1100 1105 1110

Phe Glu Asn Leu Asn Thr Glu Glu Phe Ser Ser Glu Ser Asp Met
1115 1120 1125

Glu Glu Ser Lys Glu Lys Leu Asn Ala Thr Ser Ser Ser Glu Gly
1130 1135 1140

Ser Thr Val Asp Ile Gly Ala Pro Ala Glu Gly Glu Gln Pro Glu
1145 1150 1155

Val Glu Pro Glu Glu Ser Leu Glu Pro Glu Ala Cys Phe Thr Glu

1160		1165		1170
Asp Cys Val Arg Lys Phe Lys Cys Cys Gln Ile Ser Ile Glu Glu	1175	1180		1185
Gly Lys Gly Lys Leu Trp Trp Asn Leu Arg Lys Thr Cys Tyr Lys	1190	1195		1200
Ile Val Glu His Asn Trp Phe Glu Thr Phe Ile Val Phe Met Ile	1205	1210		1215
Leu Leu Ser Ser Gly Ala Leu Ala Phe Glu Asp Ile Tyr Ile Glu	1220	1225		1230
Gln Arg Lys Thr Ile Lys Thr Met Leu Glu Tyr Ala Asp Lys Val	1235	1240		1245
Phe Thr Tyr Ile Phe Ile Leu Glu Met Leu Leu Lys Trp Val Ala	1250	1255		1260
Tyr Gly Phe Gln Val Tyr Phe Thr Asn Ala Trp Cys Trp Leu Asp	1265	1270		1275
Phe Leu Ile Val Asp Val Ser Leu Val Ser Leu Thr Ala Asn Ala	1280	1285		1290
Leu Gly Tyr Ser Glu Leu Gly Ala Ile Lys Ser Leu Arg Thr Leu	1295	1300		1305
Arg Ala Leu Arg Pro Leu Arg Ala Leu Ser Arg Phe Glu Gly Met	1310	1315		1320
Arg Ala Val Val Asn Ala Leu Leu Gly Ala Ile Pro Ser Ile Met	1325	1330		1335
Asn Val Leu Leu Val Cys Leu Ile Phe Trp Leu Ile Phe Ser Ile	1340	1345		1350
Met Gly Val Asn Leu Phe Ala Gly Lys Phe Tyr His Cys Ile Asn	1355	1360		1365
Tyr Thr Thr Gly Glu Met Phe Asp Val Ser Val Val Asn Asn Tyr	1370	1375		1380

Ser Glu Cys Lys Ala Leu Ile Glu Ser Asn Gln Thr Ala Arg Trp
1385 1390 1395

Lys Asn Val Lys Val Asn Phe Asp Asn Val Gly Leu Gly Tyr Leu
1400 1405 1410

Ser Leu Leu Gln Val Ala Thr Phe Lys Gly Trp Met Asp Ile Met
1415 1420 1425

Tyr Ala Ala Val Asp Ser Arg Asn Val Glu Leu Gln Pro Lys Tyr
1430 1435 1440

Glu Asp Asn Leu Tyr Met Tyr Leu Tyr Phe Val Ile Phe Ile Ile
1445 1450 1455

Phe Gly Ser Phe Phe Thr Leu Asn Leu Phe Ile Gly Val Ile Ile
1460 1465 1470

Asp Asn Phe Asn Gln Gln Lys Lys Lys Phe Gly Gly Gln Asp Ile
1475 1480 1485

Phe Met Thr Glu Glu Gln Lys Lys Tyr Tyr Asn Ala Met Lys Lys
1490 1495 1500

Leu Gly Ser Lys Lys Pro Gln Lys Pro Ile Pro Arg Pro Ala Asn
1505 1510 1515

Lys Phe Gln Gly Met Val Phe Asp Phe Val Thr Lys Gln Val Phe
1520 1525 1530

Asp Ile Ser Ile Met Ile Leu Ile Cys Leu Asn Met Val Thr Met
1535 1540 1545

Met Val Glu Thr Asp Asp Gln Ser Gln Glu Met Thr Asn Ile Leu
1550 1555 1560

Tyr Trp Ile Asn Leu Val Phe Ile Val Leu Phe Thr Gly Glu Cys
1565 1570 1575

Val Leu Lys Leu Ile Ser Leu Arg Tyr Tyr Tyr Phe Thr Ile Gly
1580 1585 1590

Trp Asn Ile Phe Asp Phe Val Val Val Ile Leu Ser Ile Val Gly
1595 1600 1605

Met Phe Leu Ala Glu Leu Ile Glu Lys Tyr Phe Val Ser Pro Thr
1610 1615 1620

Leu Phe Arg Val Ile Arg Leu Ala Arg Ile Gly Arg Ile Leu Arg
1625 1630 1635

Leu Ile Lys Gly Ala Lys Gly Ile Arg Thr Leu Leu Phe Ala Leu
1640 1645 1650

Met Met Ser Leu Pro Ala Leu Phe Asn Ile Gly Leu Leu Leu Phe
1655 1660 1665

Leu Val Met Phe Ile Tyr Ala Ile Phe Gly Met Ser Asn Phe Ala
1670 1675 1680

Tyr Val Lys Arg Glu Val Gly Ile Asp Asp Met Phe Asn Phe Glu
1685 1690 1695

Thr Phe Gly Asn Ser Met Ile Cys Leu Phe Gln Ile Thr Thr Ser
1700 1705 1710

Ala Gly Trp Asp Gly Leu Leu Ala Pro Ile Leu Asn Ser Gly Pro
1715 1720 1725

Pro Asp Cys Asp Pro Asp Lys Asp His Pro Gly Ser Ser Val Lys
1730 1735 1740

Gly Asp Cys Gly Asn Pro Ser Val Gly Ile Phe Phe Phe Val Ser
1745 1750 1755

Tyr Ile Ile Ile Ser Phe Leu Val Val Val Asn Met Tyr Ile Ala
1760 1765 1770

Val Ile Leu Glu Asn Phe Ser Val Ala Thr Glu Glu Ser Ala Glu
1775 1780 1785

Pro Leu Ser Glu Asp Asp Phe Glu Met Phe Tyr Glu Val Trp Glu
1790 1795 1800

Lys	Phe	Asp	Pro	Asp	Ala	Thr	Gln	Phe	Ile	Glu	Phe	Ala	Lys	Leu
1805						1810					1815			
Ser	Asp	Phe	Ala	Asp	Ala	Leu	Asp	Pro	Pro	Leu	Leu	Ile	Ala	Lys
1820						1825					1830			
Pro	Asn	Lys	Val	Gln	Leu	Ile	Ala	Met	Asp	Leu	Pro	Met	Val	Ser
1835						1840					1845			
Gly	Asp	Arg	Ile	His	Cys	Leu	Asp	Ile	Leu	Phe	Ala	Phe	Thr	Lys
1850						1855					1860			
Arg	Val	Leu	Gly	Glu	Ser	Gly	Glu	Met	Asp	Ala	Leu	Arg	Ile	Gln
1865						1870					1875			
Met	Glu	Glu	Arg	Phe	Met	Ala	Ser	Asn	Pro	Ser	Lys	Val	Ser	Tyr
1880						1885					1890			
Glu	Pro	Ile	Thr	Thr	Thr	Leu	Lys	Arg	Lys	Gln	Glu	Glu	Val	Ser
1895						1900					1905			
Ala	Ile	Ile	Ile	Gln	Arg	Ala	Tyr	Arg	Arg	Tyr	Leu	Leu	Lys	Gln
1910						1915					1920			
Lys	Val	Lys	Lys	Val	Ser	Ser	Ile	Tyr	Lys	Lys	Asp	Lys	Gly	Lys
1925						1930					1935			
Glu	Cys	Asp	Gly	Thr	Pro	Ile	Lys	Glu	Asp	Thr	Leu	Ile	Asp	Lys
1940						1945					1950			
Leu	Asn	Glu	Asn	Ser	Thr	Pro	Glu	Lys	Thr	Asp	Met	Thr	Pro	Ser
1955						1960					1965			
Thr	Thr	Ser	Pro	Pro	Ser	Tyr	Asp	Ser	Val	Thr	Lys	Pro	Glu	Lys
1970						1975					1980			
Glu	Lys	Phe	Glu	Lys	Asp	Lys	Ser	Glu	Lys	Glu	Asp	Lys	Gly	Lys
1985						1990					1995			
Asp	Ile	Arg	Glu	Ser	Lys	Lys								
2000						2005								

<211> 912
 <212> DNA
 <213> Homo sapiens

<400> 37
 gaattcttta tatgggttga atgactttct gacatagcaa ataaaaagca tgaggagaag 60
 cattatctgt taacaaaatt aacacttaaa atcaacaaag ttttaatgtt tcgttccaag 120
 aaaagcctgt ggaagatcag ttccacaact gagagctttg ggctgcttca gacatatgtc 180
 tgtgtgtacg ctgtgaaggt gtttctcttc acagttcccc gccctctagt ggtagttaca 240
 ataatgccat tttgtagtcc ctgtacagga aatgcctctt cttacttcag ttaccagaat 300
 ccttttacag gaagttaggt gtggtctttg aaggagaatt aaaaaaaaaa aaaaaaaaaa 360
 aaaaaagatt tttttttttt taaagcatga tggaatttta gctgcagtct tcttggggcc 420
 agcttatcaa tcccaaactc tgggggtaaa agattctaca ggggtaatgt tttattattc 480
 ttattatgct tattctctgt gatgcttctc tacctttaca gtagtagaat ccttggggaa 540
 atctgcagag ggaccacttt catthttgaag ctgctggctg catgttttag catgtctctt 600
 ctattagaga atccaggcat ggcagtttcc tccccagtg tgcaaggacc atcttcatgc 660
 ctatgtctgt cgctaggcat gagggctctc aggaatgggt gaaaaaatg agggatgttt 720
 tggaggcact ataatactgg ggagggcagt ctgctagctg gtagctgaaa ggtcctgggt 780
 tacttcaaca ttttttttaa ataaaactgt gcagtagttt ttgttatttt agggttccct 840
 ctgttttatc tgggtgatgc tgcagaagtg aactgcataa cacatttcac tcttagaaat 900
 gcattccata ta 912

<210> 38
 <211> 722
 <212> DNA
 <213> Homo sapiens

<400> 38
 ctcagtgcac gtaactgaca caatcacctc tatctaattg tcatgcttct tacctcctgt 60
 tctgtagcac tttcttatgc aaggagctaa acagtgatta aaggagcagg atgaaaagat 120
 ggcacagtca gtgctggtac cgccaggacc tgacagcttc cgcttcttta ccagggaatc 180
 ccttgctgct attgaacaac gcattgcaga agagaaagct aagagacca aacaggaacg 240
 caaggatgag gatgatgaaa atggcccaaa gccaaacagt gacttggaag cagsaaaatc 300
 tcttccattt atttatggag acattcctcc agagatgggt tcagtgcccc tggaggatct 360
 ggaccctac tatatcaata agaaagtgag ttcttagtca agttgccttc actgcctatt 420

tactaattgg ttctgggcta gtcccagggg tgatggtgaa gaaggctggc ctccttcct	480
ctgtctaaag tatcactaag atgctggatg ggccctgaccg tgtaatggac caatgatcct	540
agaagtcttt tggaagcact catttgaacc tgcatttgtg agacaggcag agaactggtg	600
aggcatcctc cagcgcgggg attaaggaag gacaaaagcc tattcacctt cttgaataca	660
aattatatgc ttaaaccagt gtaaattgac cctgattccc taataatgtt gagaagcaaa	720
aa	722

<210> 39
 <211> 561
 <212> DNA
 <213> Homo sapiens

<400> 39	
cctatggcat tgatcacaaa ttttcttaat aatcctcatg tcatttatca aatttaggaa	60
agtttatagt gctcagaaaa aaaaagcatc tatcttcatg tcatatgatg gtaattatta	120
tgttatacac tattttacag ggcaatattt ataaataatg gttttacttt tctcttaaaa	180
tattcttaat atatattcta agttttgttt tatgtgttgt gttttctttt tcagacgttt	240
atagtattga ataaagggaa agcaatctct cgattcagtg ccaccctgc cttttacatt	300
ttaactccct tcaaccctat tagaaaatta gctattaaga ttttggtaca ttcatacct	360
ttttcaaadc gtcacttaat atgattttct tctttgacca agttattgag ctacacattt	420
tccaaaatat ctgtgggttg caatgttatg tgttctttct ttttctttcc ttttactcaa	480
tcgttagcat gttgcaaaat gagatcacag gtaagtgaat tactttcccc cgtcttctaa	540
gtgtttcttc tctaccaac t	561

<210> 40
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 40	
acctaaatag cctcaaaata gttgatggct tggcctgaag acaagatcta aatatgaggt	60
tgctgagtta tagaatggc aaaaaaagg gtcaataata gaataataag caacaaaata	120
atagtaagca ctaaagtttt aaacttcatg gtggtgaagg catggtagtg cataaaagta	180
agatttttcc attgaacttt gtcttccttg acgatattct actttattca atatgctcat	240
tatgtgcacg attcttacca actgtgtatt tatgaccatg agtaaccctc cagactggac	300

aaagaatgtg gagtaagtat aaatattttt caatattgac ctccctttat gtttcatatt	360
gtgcttttaa caccttgaga cctcctcaat ttctttaaca aatcatgcta gctactgtta	420
accagaccct gattcaaatt catttctgtc actaaatgtc ttctaggaca aagcttgtag	480
tgggctcact tagttgtgta aattactgca	510

<210> 41
 <211> 370
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (293)..(293)
 <223> n= a, c, t or g

<400> 41	
taagatatgt acttgtaaata taaccactag atttttaatg tgagcttggc tattgtctct	60
caggatatacc ttacaggaa ttatacttt tgaatcactt attaaaatac ttgcaagggg	120
cttttgttta gaagatttca cattttttacg ggatccatgg aattggttgg atttcacagt	180
cattactttt gcgtaagtat cttaatacat tttctatcct ggaagagtaa atcactggtg	240
ggagcctata ctatattttc cttgggtggct tgccttgaca gaccaagcat ttntcttagt	300
aatcatagtt ttcttccaat caaattatcc agtttggaga aattaggaac tatcatagta	360
aattacatgg	370

<210> 42
 <211> 370
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (133)..(133)
 <223> n = a, c, t or g

<400> 42	
caattagcac tgtaaagtaa taaagtttcc caaataacag agattatgat tgatgacaat	60
gccattttcc tcttaattgg gaaagctgat ggcgacactc atgaaattaa aaaggtcttg	120
atgaaagacc aangaagacg tagattttcc taaattctga ataactctga tttaattcta	180
caggatatgta acagaatttg taaacctagg caatgtttca gctcttcgaa ctttcagagt	240
cttgagagct ttgaaaacta tttctgtaat tccaggtaag aagaaaatgg tataaggtgg	300

taggccccctt atatctccaa ctgtttcttg tgttctgtca ttgtgtttgt gtgtgaaccc	360
cctattacag	370

<210> 43
 <211> 410
 <212> DNA
 <213> Homo sapiens

<400> 43	
gtaagaagaa aatgggtataa ggtggtaggc cccttatatc tccaactgtt tcttgtgttc	60
tgtcattgtg tttgtgtgtg aaccccctat tacagatatg tgacagagtt tgtggacctg	120
ggcaatgtct cagcgttgag aacattcaga gttctccgag cattgaaaac aatttcagtc	180
attccagggtg agagctaggt taaacaccga ggctgacttt agctacagtg gtgctacaat	240
cacagctttt gtgcagaagc cttgttgcta gttgcatatt gcaaataaat atgtaaaaaa	300
gcaagaattg gtacatcatt ttttgatgg atttgattct ttgcttttta cccgttgctt	360
tctttaaaac tattctaaat cagcctttga gtttaacaag tgttgcatga	410

<210> 44
 <211> 1066
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (229)..(229)
 <223> n = a, c, t or g

<400> 44	
aaagagtgtt tggaaataca catttggttc atttccattc acagttttct aatgaacata	60
caagttctgc tttcattcat tttcaccagc tagtaggctt ttcataaaaa tgttattcaa	120
tcacaaacat taaactaata ttgttggcat tctgcatgac atttttatatt tccaggccaa	180
gctcatgata tttttgccgg taaaatagct gttgagtagt atatttaant tcccccttct	240
gattttgttt gtaggcctga agaccattgt gggggccctg atccagtcag tgaagaagct	300
ttctgatgtc atgatcttga ctgtgttctg tctaagcgtg tttgcgctaa taggattgca	360
gttgttcatg ggcaacctac gaaataaatg tttgcaatgg cctccagata attcttcctt	420
tgaaataaat atcacttcct tctttaacaa ttcattggat gggaatggta ctactttcaa	480
taggacagtg agcatattta actgggatga atatattgag gataaaaagta agatatactc	540

tataaaccat taagttggtt agttctctaa atattaaata ttatatataa tggaaattat	600
ctcaatttag atgtgaatca agtgacttag actaatttaa gatgatttaa tacatataaa	660
agagatatca aaggatacct tattctattt ttsttatctg tccattgata tagtaaaagt	720
tctcatttga aaatgtgttg tcttatactc atgttgaaag taatttcata ttatgccata	780
ttaaaaaagg tttatttggt agacattaat caggtttttc agtcatttta ataaataagt	840
cagtagtttg aactattcmg cgtattccac tgaaatgtcg ttaagaagac tgaggggaaa	900
taatttggcc ctatttggtt gatgcaacat atgtattgag tacatatgct atatctgaaa	960
ctagagaaac catttatcaa gatgaaataa gaatttgtgt gctcctcaga aggttaagta	1020
accctgattt agccattcac ttcattccata ttctaattag tccctt	1066

<210> 45
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 45	
gttcaattat tgtgaaaaat cttctttagc catatatatt tattagttaa tccatctcat	60
tatgattgaa aacatttgtg agctttgccca cctaaacagg gtggctgaag tgttttacag	120
gattttaatg attcttttcta ttccttttctc tttaaataagg tcacttttat tttttacagg	180
ggcaaaatga tgctctgctt tgtggcaaca gctcagatgc agggtaagtg tatgcttcct	240
actgagtttc agtccacact gctccatcag tgtcaataac ctgccacctc ccactcatcc	300
agtcccacca ctctcactc aaaaccctcc ataaattcta cttcacggtg actctcagaa	360
tgaccaggat aagtgtagat tctca	385

<210> 46
 <211> 430
 <212> DNA
 <213> Homo sapiens

<400> 46	
tataataatg acaattatga atcacagagg aatccacaaa gtagacctta tagattctgt	60
cattatataa atcagtccac ttagtgctga gttaagtact gggtaagggtg agagaaatcg	120
gcttttttct agtgccctgta taaaacagac attggcatat attaaaacag gaaaaccaat	180
tagcagactt gccgttattg actycctctc tttcctctaa cctaattaca gccagtgtcc	240
tgaaggatac atctgtgtga aggctggtag aaaccccaac tatggctaca cgagctttga	300
cacctttagt tgggcctttt tgtccttatt tcgtctcatg actcaagact tctgggaaaa	360

cctttatcaa ctggtgagaa cagataaaat catttttctg agaatcataa aacaccgaac 420
tcaagagaat 430

<210> 47
<211> 646
<212> DNA
<213> Homo sapiens

<400> 47
tgctgtagaa tattttatta cttagagtgt aagtttgtaa catcctatat aaaatttatt 60
aaaatctctc ttccattttg cagacactac gtgctgctgg gaaaacgtac atgatatttt 120
ttgtgctggg cattttcttg ggctcattct atctaataaa tttgatcttg gctgtgggtgg 180
ccatggccta tgaggaacag aatcaggcca cattggaaga ggctgaacag aaggaagctg 240
aatttcagca gatgctcgaa cagttgaaaa agcaacaaga agaagctcag gtatagttaa 300
caagcatacg gtcctttgtt tttctgtatc taaattcttt aacctaaatg ttgaggtcag 360
tggcaaggta gttgacatta gaaataggtc atatgtgttt ggtaagtgtc aggagcctgt 420
ttggttatta agaagttatt actttattgc aatgatctct gtcaatagtg tcaatagtaa 480
tggcatcaaa aaatggataa ttataattgc tttactgaca tttttttctc cttgtgact 540
ccttgaggaa attaatgatt aacaaaggcc tcatgtactc aaacttgcag agtagataaa 600
cctacatgtc ctcaagtgaa gtattttctt aggggaagag gaattc 646

<210> 48
<211> 711
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (164)..(164)
<223> n = a, c, t or g

<400> 48
tatgtatcat cttccatatg aatgcgcatt ttactctttg attggtctaa taacagtgtg 60
ctgtgttcta aaacacagaa taaaatggag aattgttttt caagattatc ttcatgatat 120
tgaagctcaa ttaagcagta acatgataat tattttttta gatnatatgc aacttcccac 180
atactttgcg cccttctagg cggcagctgc agccgcatct gctgaatcaa gagacttcag 240
tgggtgctggg gggataggag ttttttcaga gagttcttca gtagcatcta agttgagctc 300

caaaagtgaa aaagagctga aaaacagaag aaagaaaaag aaacagaaaag aacagtctgg	360
agaagaagag aaaaatgaca gagtcctaaa atcggaatct gaagacagca taagaagaaa	420
aggtttccgt ttttccttgg aaggaagtag gctgacatat gaaaagagat tttcttctcc	480
acaccaggta aaaatattaa attacatgaa ttgtgttctc ataaattttt taaaagaata	540
tgccagaatt taatggagag aaaaccgcct tccacctgga tggcacaatg ctttcagagt	600
agtgatgatt atcaagtgtt ttggctatca cttcagagaa tttgtgagtt ttgcaacttt	660
ttggaatccc aggaaggaaa ttttagatcc ctctgggttt ggaaaaattt g	711

<210> 49

<211> 1026

<212> DNA

<213> Homo sapiens

<400> 49

ttatggggac acttctgact atgttgaggt gtgggtaaag taggagaaaa gagagcagaa	60
gatggaaaat ggaggaagga gaaaaagcga gagtgaata gaaaaggatga accttgtaga	120
aagtgccaaa atgccaccag cagtcatcag aggggtgctt tcttcacat gtccaatgac	180
ttatccttga gtaagtcaat gactatgaca caatgaatca aattctgttt ttcagaatgc	240
cagctcttaa ctctcttcat ctcatTTTTTg tttcttttct tgttattcat agtccttact	300
gagcatccgt ggctcccttt tctctccaag acgcaacagt agggcgagcc ttttcagctt	360
cagaggtcga gcaaaggaca ttggctctga gaatgacttt gctgatgatg agcacagcac	420
ctttgaggac aatgacagcc gaagagactc tctgttcgtg ccgcacagac atggagaacg	480
gcgccacagc aatgtcagcc aggccagccg tgcctccagg gtgctcccca tctgccccat	540
gaatgggaag atgcatagcg ctgtggactg caatgggtgtg gtctccctgg tcggggggccc	600
ttctaccctc acatctgctg ggcagctcct accagagggtg aggccaaacy magattgcag	660
ctgatgtgaa gagagtgtg actggtgcag gcaggagtgy ttttccattt mcacatctaa	720
gaatttkttg agtttsttgc ccaaaggctg ggagtttggt caatcaagct gttaactgtc	780
ttgtgaaact sttctattca gacttitycta caaagtaatt aaaaacctag gttggctgtc	840
agagaatata attagamgtm atctttcatc ayyattacta tggtatgaaa ctcgcaaaaa	900
agcaaagcaa caatttatca agcataatgt tygaytaata tagttaaatt aaatccaagg	960
aaattaatgc tcacaaatta aataaatact taaggatttt gtgattgttg ttcatttaaa	1020
aggaga	1026

<210> 50
<211> 601
<212> DNA
<213> Homo sapiens

<400> 50
ataggaaagc ccaccttgac aaaccaggg ctccccaaaa gctgaaaatc tgacagactt 60
taaacaaccc ccaaataatt atcattccaa caatatctta gtgagctttt tacatctgag 120
aaagcatggg gtatatcttag ttaaataaca cctgttgtag gaatgctttg ggctttgctg 180
ctttcaaaaa tagtggttat ttcactctgaa attctacttc tagggcacia ctactgaaac 240
agaaataaga aagagacggg ccagttctta tcatgtttcc atggatttat tggaagatcc 300
tacatcaagg caaagagcaa tgagtatagc cagtattttg accaacacca tggaaggat 360
gttaaaagtc ctgcgtcaca gttacttggg gctttcctaa tgatgaaaaa cacttcataa 420
atttcaataa aatacttcct gacttgatat tgtatcatta ttacacattt tactaaataa 480
cagtaaaatc cgtgcataac tcatggattc atatattcca cagatttttt ttttttatat 540
ttagcctgta gaaagctgct gcaaagttaa ggtatatttg aacaccactt tcataactta 600
a 601

<210> 51
<211> 645
<212> DNA
<213> Homo sapiens

<400> 51
gcttactagc ctttctgtac tgatcctttc tatgacagca aaccattgt aaaattttcc 60
ctgttctctc agcagattaa ccataatat cttttaacaa ctttagattt tttaaattcc 120
ttttaattta aaccaaactc gcttaataga aagtaagcag ttttcatgag gattctaact 180
ttttttcttc cagaacttga agaattcaga cagaaatgcc caccatgctg gtataaattt 240
gctaatatgt gtttgatttg ggactgttgt aaaccatggg taaagggtgaa acaccttgct 300
aacctgggtg taatggaccc atttgttgac ctggccatca ccatctgcat tgtcttaaat 360
acactcttca tggctatgga gcactatccc atgacggagc agttcagcag tgtactgtct 420
gttggaacc tggtagcct cactgagagt ttctcttctt cttgaaagag tttataattg 480
ccttagtgaa tttacatat tgctctcaaa ttaaataatca actaattggc catgtatatc 540
ttgacatcaa atgttttagca tcccttttaa ataacaaaaa aatgttgcta ccatagtgca 600
aaagagtcaa agaatttatg tacaatttga tttagaattg aattt 645

<210> 52
<211> 485
<212> DNA
<213> Homo sapiens

<400> 52
tggcccaaac caatttttaa atcaggaatt taatttwtat attgttggga gttaaattaa 60
gttgctcaat aattattcgt gtttcaakas tatttgctca tataatgaac tacacttctc 120
atttaggtct tcacagggat cttcacagca gaaatgtttc tcaagataat tgccatggat 180
ccatattatt actttcaaga aggctggaat atttttgatg gttttattgt gaggcttagt 240
ttaatggaac ttggtttggc aaatgtggaa ggattgtcag ttctccgatc attccggctg 300
gtaaattaac tgggagtgtt cataaaatgt actttrtaat taattagtct tcattctcat 360
ctagtaaaaa tggcaagatt tcccatcatt ataatatatt tgaatacctt ctaaaacaga 420
ttggattgcc ataccaccaa atggtagttt cttcttcac atagctttaa taaagttcac 480
ttaaa 485

<210> 53
<211> 602
<212> DNA
<213> Homo sapiens

<400> 53
acagatttcc tcctgtgtcc atgtgactaa cccattgtgc acatgtaccc taaaaattag 60
tatataataa taaaataaaa taaaaataaa aataaaaaaa taaaaataaa ataaaattgc 120
agattttttt agaaatgcag agattaacac tgttcttgct tttatttcca gctccgagtt 180
ttcaagttgg caaaatcttg gccaaactcta aatatgctaa ttaagatcat tggcaattct 240
gtgggggctc taggaaacct caccttggtg ttggccatca tcgtcttcat ttttgctgtg 300
gtcggcatgc agctctttgg taagagctac aaagaatgtg tctgcaagat ttccaatgat 360
tgtgaactcc cacgctggca catgcatgac tttttccact ccttctgat cgtgttccgc 420
gtgctgtgtg gagagtggat agagaccatg tgggactgta tggaggtcgc tggccaaacc 480
atgtgcctta ctgtcttcat gatggctcat gtgattggaa atctagtggg atgtagcaaa 540
aacattttcc tcattttcat taaaaataat gtaatcatta aaaagtgttc aactgaagaa 600
ta 602

<210> 54

<211> 803
<212> DNA
<213> Homo sapiens

<400> 54
gtttcattta gcaatgattt cagtattttc tgcaatgact aataagcaaa tagtgataat 60
agtattatth tatattgacc aagcattttt atttcattca cttttttttca gaatagtgtg 120
tcatgaatta gcagaaatgc atgttagaat aaaataaggt gtcaagaaca atcttagaaa 180
actaatgatg gaaagcaatt gaagcaatag aatgttttga tcacctgttt ttcctgtctg 240
gtttcaggtt ctgaacctct tcttggcctt gcttttgagt tccttcagtt ctgacaatct 300
tgctgccact gatgatgata acgaaatgaa taatctccag attgctgtgg gaaggatgca 360
gaaaggaatc gattttgtta aaagaaaaat acgtgaattt attcagaaag cttttgttag 420
gaagcagaaa gcttttagatg aaattaaacc gcttgaagat ctaaataata aaaaagacag 480
ctgtatttcc aaccatacca ccatagaaat aggcaaagac ctcaattatc tcaaagacgg 540
aatggaact actagtggca taggcagcag tgtagaaaaa tatgtcgtgg atgaaagtga 600
ttacatgtca tttataaaca accctagcct cactgtgaca gtaccaattg ctgttggaga 660
atctgacttt gaaaatttaa atactgaaga attcagcagc gagtcagata tggaggaaaag 720
caaagaggta aaatgttaaa taaggagata ttttggtgta tataatctgt gttaaatac 780
aggtgtttta tgcgtgtctc tgt 803

<210> 55
<211> 615
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (90)..(90)
<223> n = a, c, t or g

<220>
<221> misc_feature
<222> (378)..(386)
<223> n = a, c, t or g

<400> 55
atctctatac taggctcaaa cagaagttat ttccgttggt agcaccatat ttttaaaaga 60
aaaaaaaaata ctatggtggt gtatctaata ttgtgacccc tgacctttac caaagcggat 120
tggcattatg tttaagttct taattacaga tcaagaaaaa tgcatacaga agatgggggg 180

gggcacacct aattaatttt tatatttaga ttaaagaaaa taattaaatg tgtttttttg	240
tgggattgat tttcagaagc taaatgcaac tagttcatct gaaggcagca cggttgatat	300
tggagctccc gccgaggag aacagcctga ggttgaacct gaggaatccc ttgaacctga	360
agcctgtttt acagaagnnn nnnnnnaagc aaaacaataa catatgtggt cttgagtatc	420
ctcttttcta cccatttttt cctatttatt taaatgtctg tttatttgtc taccatctag	480
ttcatctatc tatctgtatc tatctatcta tctatctatc tagtaatcat ctatacctat	540
ccaacaactg tacatttatt tgtttttttt ttttgcattt gctgtttgaa aaaaaatgca	600
acgtttttaa ggcaa	615

<210> 56
 <211> 400
 <212> DNA
 <213> Homo sapiens

<400> 56	
gatagctttt gtaagcggaa gctatcttaa aaattaatgt tatttacaat gtattatcag	60
gtaataatgt aaatgaatct cccaccaaca caaatatacc taatcaaaga gtaatttttt	120
gtcttcattt ttttcccaca tatttttagac tgtgtacgga agttcaagtg ttgtcagata	180
agcatagaag aaggcaaagg gaaactctgg tggaatttga ggaaaacatg ctataagata	240
gtggagcaca attggttcga aaccttcatt gtcttcatga ttctgctgag cagtggggct	300
ctggtaggtg atgcatgatc cactccttca cctttcatct gaaatctttt ccctttccct	360
tcaatcaact catattaccc actttttaa taagggtgtt	400

<210> 57
 <211> 560
 <212> DNA
 <213> Homo sapiens

<400> 57	
aaattactga aacccttggt tgactgaaat gcccagtcag cagtcattta tgatcagata	60
atgataaagt aaaattcagc catgggaaac attaaacctt ccagccttag gcacctgata	120
agagcttgca tcgtttcctt ttttaagaaa tcatcaatta gagactgttt ctgatcataa	180
aatttaatag aattttttga cttacaggcc tttgaagata tatacattga gcagcgaaaa	240
accattaaga ccatgttaga atatgctgac aagggtttca cttacatatt cattctggaa	300
atgctgctaa agtgggttgc atatggtttt caagtgtatt ttaccaatgc ctggtgctgg	360
ctagacttcc tgattgttga tgtgagtatg ctgcactttg ctgctttatt cattggcata	420

tatgtaatag ttctagcaat ggtgcctgac acagtgtagg cactcagtaa cactgtatca 480
 gcccaaatat aaattatggt tctcatttca cagtgagagg atgcctcaaa acatttttta 540
 ccaatttaaa tacatatata 560

<210> 58
 <211> 480
 <212> DNA
 <213> Homo sapiens

<400> 58
 aaattcttag gcctttcccc aaacttacta agtcagactc tgctattggt gtttttaaca 60
 agacccttg gtgattttga aactcatgaa agttcgagaa ttactgattc attgcataga 120
 gcaaggctga actgtgtaga catttttata tgtaaataag aaaattgtgt tgctttttct 180
 gtataggtct cactggttag cttaactgca aatgccttg gttactcaga acttgggtgcc 240
 atcaaatccc tcagaacact aagagctctg aggccactga gagctttgtc ccggtttgaa 300
 ggaatgaggg taagactgaa tgccttagag tttgtcagaa ttattattga gagcagactg 360
 acactttgta ccatggaaat gtcaaattta tggagaattt gtgtcttaca cattcatact 420
 gacatagcta atcaatcaaa aataatattt accagatgcc cataatactt ggcactgctg 480

<210> 59
 <211> 640
 <212> DNA
 <213> Homo sapiens

<400> 59
 taattttaaa attcttagtt ggagctacca gagtctagtt tctaccaat attcaacttt 60
 gaaacagatt tttttaatca tttgactggt cttttaataa tgtttaaaaa taagtaaata 120
 tttgttggtg gcttttctact tatttttctt tctcatctg tgccagggtg ttgtaaattgc 180
 tcttttagga gccattccat ctatcatgaa tgtacttctg gtttgtctga tcttttggct 240
 aatattcagt atcatgggag tgaatctctt tgctggcaag ttttaccatt gtattaatta 300
 caccactgga gagatgtttg atgtaagcgt ggtcaacaac tacagtgagt gcaaagctct 360
 cattgagagc aatcaaaactg ccagggtgaa aaatgtgaaa gtaaaactttg ataacgtagg 420
 acttgatgat ctgtctctac ttcaagtagt aagtaatcac tttattattt tccatgatgt 480
 gtaattaaaa tgagtctaaa gtttttcttc ctcataatga gatatccacc tgttagaatg 540
 gctattatca aacagataaa tgacaataaa tgctggcaag aatgtgaaga aaaggaacc 600

cttgtagcatt gttggcaggg atgtaaatta gtatagcttt 640

<210> 60
<211> 480
<212> DNA
<213> Homo sapiens

<400> 60
atttgaagta ttttcaatgc atatcgcaaa acattgcccc aaaagtgaat acaaatttca 60
agcttatttta tatgcctgta ttgaatacat gtcaaataga attttgatca attattcaat 120
ttatttttcta aaattataat tttgggaaaa aagaaaatga tatgactttt cttacaggcc 180
acgtttaagg gatggatgga tattatgtat gcagctgttg attcacgaaa tgtaagtcta 240
gttagaggga aattgttttag tttgattaaa tgtatatttc tacaatattg taatttagtg 300
atattgtcaa taaaataaaa ttatgtgctt aatttataaa acccatctat attataagga 360
taaaatattt aatcatacta tttctttcaa aattatcata ggatgatttt ctctaatac 420
tctgtatctt ttaacatata ttttctagta tttagcaagg cacctgacac aaaactttat 480

<210> 61
<211> 366
<212> DNA
<213> Homo sapiens

<400> 61
taaaacatgc ttagataatt aaaaactcac tgatgtactt tttgtgaaac aagtactaga 60
tataatgggtt acaattcttc atattcttta ggtagaatta caaccaagt atgaagacaa 120
cctgtacatg tatctttatt ttgtcatctt tattatTTTTT gggtcattct ttaccttgaa 180
tcttttcatt ggtgtcatca tagataactt caaccaacag aaaaagaaga taagtatatt 240
aaaacttcat ccttgctctg aaatatgaac taaatatttc atactctttc ctttagcctc 300
caaatgcaa tcacaaaaa aagaatataa aattcagaaa ttattttgag acatttgata 360
atcgat 366

<210> 62
<211> 560
<212> DNA
<213> Homo sapiens

<400> 62
tcgataagct tttaagcaat taataattca gatagcatgt ttttgatatt tttagtctag 60
aaatatgact aatatggcat aatttatata ttgaataaag gcattctctat aaatacagat 120

attagtaaca atagaatgaa atgtgggagc caattttcac atgattacta aggtggattt	180
tatagccagc aaagaacaca attttaacaa gtgttgcttt catttcttta ctttggaggt	240
caagacattt ttatgacaga agaacagaag aaatactaca atgcaatgaa aaaactgggt	300
tcaaagaaac cacaaaaacc catacctcga cctgctgtaa gaataacata ttttcattgc	360
ctgttaaaac tatattacct aaccgtttca cagcccgaat ttctagaaac tagttatttt	420
tgtggatttg taacacaaag ttttttacct taacaatggg actagctagc ctaaatagct	480
tgaaaaatgt actttacata tataatatgt ataaattata taatgcataa catattttat	540
atgtaaacad ataaaaataca	560

<210> 63
 <211> 650
 <212> DNA
 <213> Homo sapiens

<400> 63	
gttttgcaag gaattttttt ttttgtaaaa tgtgtgaggt attaaagatg tgtttttata	60
aaagctacat tttttgttgc tttcttaaaa tcagaagaat tgaattcgat tttttttaag	120
gtttctaattg gaacttttac atattatttg ttccagaaca aattccaagg aatgggtcttt	180
gattttgtaa ccaaacaagt ctttgatatc agcatcatga tcctcatctg ccttaacatg	240
gtcaccatga tggtggaac cgatgaccag agtcaagaaa tgacaaacat tctgtactgg	300
attaatctgg tgtttattgt tctgttcact ggagaatgtg tgctgaaact gatctctctt	360
cgttactact atttcactat tggatggaat atttttgatt ttgtgggtggc cattctctcc	420
attgtaggta agaagagggt cttttattca gttaaggaat atagtggtaa aaatatgtgt	480
tttaaaactt tagagggtgt tttcactaat ctttctcatt catcccaaac tcccaaataa	540
aaatctaata gtccattgtt ttagtttttag ttgccattt ctctaattgc atgctgtgct	600
tgaaatgatg agtggaatac aaggaattta tattttcagc tttcatttat	650

<210> 64
 <211> 3700
 <212> DNA
 <213> Homo sapiens

<400> 64	
aatgttataa caccaaacad accagtttca ttttgctcaa caaacattgc agattatttg	60
catatataca tgtacctaac tgtcctgttc acattttgta aaactaatgt acttatgtaa	120
actttcattt gctactatta agtataacaa tatttttgtt atttggtgat tttctacagg	180

aatgtttctg gctgaactga tagaaaagta ttttgtgtcc cctaccctgt tccgagtgat	240
ccgtcttgcc aggattggcc gaatcctacg tctgatcaaa ggagcaaagg ggatccgcac	300
gctgctcttt gctttgatga tgtcccttcc tgcgttggtt aacatcggcc tccttctttt	360
cctggtcatg ttcattctacg ccatctttgg gatgtccaat tttgcctatg ttaagaggga	420
agttgggatc gatgacatgt tcaactttga gacctttggc aacagcatga tctgcctggt	480
ccaaattaca acctctgctg gctgggatgg attgctagca cctattctta atagtggacc	540
tccagactgt gaccctgaca aagatcaccg tggaagctca gttaaaggag actgtgggaa	600
cccatctggt gggattttct tttttgtcag ttacatcatc atatccttcc tggttgtggt	660
gaacatgtac atcgcggtca tcctggagaa cttcagtgtt gctactgaag aaagtgcaga	720
gcctctgagt gaggatgact ttgagatgtt ctatgagggt tgggagaagt ttgatcccg	780
tgcgaccag tttatagagt ttgccaaact ttctgatttt gcagatgcc tggatcctcc	840
tcttctcata gcaaaaccca acaaagtcca gctcattgcc atggatctgc ccatggtgag	900
tggtgaccgg atccactgtc ttgacatctt atttgctttt acaaagcgtg ttttgggtga	960
gagtggagag atggatgccc ttcgaataca gatggaagag cgattcatgg catcaaacc	1020
ctccaaagtc tcttatgagc ccattacgac cacgttgaaa cgcaaacaag aggaggtgtc	1080
tgctattatt atccagaggg cttacagacg ctacctcttg aagcaaaaag ttaaaaagg	1140
atcaagtata tacaagaaag acaaaggcaa agaattgtgat ggaacacca tcaaagaaga	1200
tactctcatt gataaactga atgagaattc aactccagag aaaaccgata tgacgccttc	1260
caccacgtct ccaccctcgt atgatagtgt gaccaaacca gaaaagaaa aatttgaaaa	1320
agacaaatca gaaaaggaag acaaaggga agatatcagg gaaagtaaaa agtaaaaaga	1380
aaccaagaat tttccatttt gtgatcaatt gtttacagcc cgtgatggtg atgtgtttgt	1440
gtcaacagga ctcccacagg aggtctatgc caaactgact gtttttacia atgtatactt	1500
aaggtcagtg cctataacia gacagagacc tctggtcagc aaactggaac tcagtaaact	1560
ggagaaatag tatcgatggg aggtttctat ttccacaacc agctgacact gctgaagagc	1620
agaggcgtaa tggctactca gacgatagga accaatttaa aggggggagg gaagttaaat	1680
ttttatgtaa attcaacatg tgacacttga taatagtaat tgtcaccagt gtttatgttt	1740
taactgccac acctgccata tttttacaaa acgtgtgctg tgaatttatc acttttcttt	1800
ttaattcaca ggttggtttac tattatatgt gactattttt gtaaattgggt ttgtgtttgg	1860

ggagaggggat taaagggagg gaattctaca tttctctatt gtattgtata actggatata	1920
ttttaaatgg aggcattgctg caattctcat tcacacataa aaaaatcaca tcacaaaagg	1980
gaagagttta cttcttggtt caggatgttt ttagattttt gaggtgctta aatagctatt	2040
cgtattttta aggtgtctca tccagaaaaa atttaatgtg cctgtaaatg ttccatagaa	2100
tcacaagcat taaagagttg ttttattttt acataaccca ttaaattgtac atgtatatat	2160
gtatatatgt atatgtgcgt gtatatacat atatatgtat acacacatgc acacacagag	2220
atatacacat accattacat tgtcattcac agtcccagca gcatgactat cacatttttg	2280
ataagtgtcc tttggcataa aataaaaaata tcctatcagt cttttctaag aagcctgaat	2340
tgaccaaaaa acatccccac caccacttta taaagttgat tctgctttat cctgcagtat	2400
tgtttagcca tcttctgctc ttggtaaggt tgacatagta tatgtcaatt taaaaataa	2460
aagtctgctt tgtaaatagt aattttaccc agtgggtgcat gtttgagcaa acaaaaatga	2520
tgatttaagc aactactta ttgcatcaaa tatgtaccac agtaagtata gtttgcaagc	2580
tttcaacagg taatatgatg taattgggtc cattatagtt tgaagctgtc actgctgcat	2640
gtttatcttg cctatgctgc tgtatcttat tccttcact gttcagaagt ctaatatggg	2700
aagccatata tcagtggtaa agtgaagcaa attgttctac caagacctca ttcttcatgt	2760
cattaagcaa taggttgcag caaacaagga agagcttctt gctttttatt cttccaacct	2820
taattgaaca ctcaatgatg aaaagccga ctgtacaaac atgttgcaag ctgcttaaat	2880
ctgtttaaaa tatatgggta gagttttcta agaaaatata aatactgtaa aaagttcatt	2940
ttattttatt tttcagcctt ttgtacgtaa aatgagaaat taaaagtatc ttcaggtgga	3000
tgtcacagtc actattgtta gtttctgttc ctagcacttt taaattgaag cacttcacaa	3060
aataagaagc aaggactagg atgcagtgtg ggtttctgct tttttattag tactgtaaac	3120
ttgcacacat ttcaatgtga aacaaatctc aaactgagtt caatgtttat ttgctttcaa	3180
tagtaatgcc ttatcattga aagaggctta aagaaaaaaa aaatcagctg atactcttg	3240
cattgcttga atccaatgtt tccacctagt ctttttatcc agtaatcatc agtcttttcc	3300
aatgtttgtt tacacagata gatcttattg acccatatgg cactagaact gtatcagata	3360
taatatggga tcccagcttt ttttctctc ccacaaaacc aggtagtga gttatattac	3420
cagttacagc aaaatacttt gtgtttcaca agcaacaata aatgtagatt ctttatactg	3480
aagctattga cttgtagtgt gttggtgaat gcatgcagga agatgctgtt accataaaga	3540
acggtaaacc acattacaat caagccaaag aataaagggt cgcttatgta tatgtattta	3600

attgttgtct ttgtttctat ctttgaaatg ccattttaaag gtagatttct atcatgtaaa	3660
aataatctat ctgaaaaaca aatgtaaaaga acacacatta	3700

<210> 65
 <211> 9112
 <212> DNA
 <213> Homo sapiens

<400> 65	
accatagagt gaatctcaga acaggaagcg gaggcataag cagagaggat tctggaaagg	60
tctctttgtt ttcttatcca cagagaaaga aagaaaaaaaa attgtaacta atttgtaaac	120
ctctgtggtc aaaaaaaaaa aaaaaaaaaa aagctgaaca gctgcagagg aagacacgtt	180
ataccctaac catcttggat gctgggcttt gttatgctgt aattcataag gctctgtttt	240
atcagagatt atggagcaag aaaactgaag ccaagccaca tcaaggtttg acagggatga	300
gatacctgtc aaggattcat agtagagtgg cttactggga aaggagcaaa gaatctcttc	360
tagggatatt gtaagaataa atgagataat tcacagaagg gacctggagc ttttccggaa	420
aaaggtgctg tgactatcta aggggaaaag ctgagagtct ggaactagcc tatcttccga	480
ggacttagag acaacagtat gggaatttca acgagacgtt ttacttttct tttgaccaag	540
attcaaattc tttattccag cccttgataa gtaaataaga aggtaattcg tatgcaagaa	600
gctacacgta attaaatgtg caggatgaaa agatggcaca ggactgttg gtacccccag	660
gacctgaaag cttccgcctt ttactagag aatctcttgc tgctatcgaa aaacgtgctg	720
cagaagagaa agccaagaag cccaaaaagg aacaagataa tgatgatgag aacaaaccaa	780
agccaaatag tgacttggaa gctggaaaga accttccatt tatttatgga gacattcctc	840
cagagatggg gtcagagccc ctggaggacc tggatcccta ctatatcaat aagaaaactt	900
ttatagtaat gaataaagga aaggcaattt cccgattcag tgccacctct gccttgata	960
ttttaactcc actaaaccct gttaggaaaa ttgctabsaa gatttttgga cattctttat	1020
tcagcatgct tatcatgtgc actattttga ccaactgtgt atttatgacc ttgagcaacc	1080
ctcctgactg gacaaagaat gtagagtaca cattcactgg aatctatacc tttgagtcac	1140
ttataaaaaat cttggcaaga gggtttttgct tagaagattt tacgttttctt cgtgatccat	1200
ggaactggct ggatttcagt gtcattgtga tggcatatgt gacagagttt gtggacctgg	1260
gcaatgtctc agcgttgaga acattcagag ttctccgagc actgaaaaca atttcagtca	1320
ttccaggttt aaagaccatt gtggggggccc tgatccagtc ggtaaagaag ctttctgatg	1380

tgatgacct	gactgtgttc	tgtctgagcg	tgtttgctct	cattgggctg	cagctgttca	1440
tgggcaatct	gaggaataaa	tgtttgagct	ggcccccaag	cgattctgct	tttgaaacca	1500
acaccacttc	ctactttaat	ggcacaatgg	attcaaatgg	gacatttggt	aatgtaacaa	1560
tgagcacatt	taactggaag	gattacattg	gagatgacag	tcacttttat	gttttgatg	1620
ggcaaaaaga	ccctttactc	tgtggaaatg	gctcagatgc	aggccagtgt	ccagaaggat	1680
acatctgtgt	gaaggctggt	cgaaacccca	actatggcta	cacaagcttt	gacaccttta	1740
gctgggcttt	cctgtctcta	tttcgactca	tgactcaaga	ctactgggaa	aatctttacc	1800
agttgacatt	acgtgctgct	gggaaaacat	acatgatatt	ttttgtcctg	gtcattttct	1860
tgggctcatt	ttatttggtg	aatttgatcc	tggctgtggt	ggccatggcc	tatgaggggc	1920
agaatcaggc	caccttgga	gaagcagaac	aaaaagaggc	cgaatttcag	cagatgctcg	1980
aacagcttaa	aaagcaacag	gaagaagctc	aggcagttgc	ggcagcatca	gctgcttcaa	2040
gagatttcag	tggaataggt	gggttaggag	agctgttgga	aagttcttca	gaagcatcaa	2100
agttgagttc	caaaagtgt	aaagaatgga	ggaaccgaag	gaagaaaaga	agacagagag	2160
agcaccttga	aggaaacaac	aaaggagaga	gagacagctt	tcccaaattcc	gaatctgaag	2220
acagcgtcaa	aagaagcagc	ttccttttct	ccatggatgg	aaacagactg	accagtgaca	2280
aaaaattctg	ctccctcat	cagtctctct	tgagtatccg	tggctccctg	ttttcccaa	2340
gacgcaatag	caaaacaagc	attttcagtt	tcagaggtcg	ggcaaaggat	gttgatctg	2400
aaaatgactt	tgctgatgat	gaacacagca	catttgaaga	cagcgaaagc	aggagagact	2460
cactgtttgt	gccgcacaga	catggagagc	gacgcaacag	taacggcacc	accactgaaa	2520
cggagtcag	aaagagaagg	ttaagctctt	accagatttc	aatggagatg	ctggaggatt	2580
cctctggaag	gcaaagagcc	gtgagcatag	ccagcattct	gaccaacaca	atggaagaac	2640
ttgaagaatc	tagacagaaa	tgtccgcat	gctggtatag	atttgccaat	gtgttcttga	2700
tctgggactg	ctgtgatgca	tgggtaaaag	taaaacatct	tgtgaattta	attgttatgg	2760
atccatttgt	tgatcttgcc	atcactatct	gcattgtctt	aaataccctc	tttatggcca	2820
tgagcacta	ccccatgact	gagcaattca	gtagtgtgtt	gactgtagga	aacctggtct	2880
ttactgggat	ttttacagca	gaaatgggtc	tcaagatcat	tgccatggat	ccttattact	2940
atttccaaga	aggctggaat	atctttgatg	gaattattgt	cagcctcagt	ttaatggagc	3000
ttggtctgtc	aaatgtggag	ggattgtctg	tactgcgac	attcagactg	cttagagttt	3060

tcaagttggc	aaaatcctgg	cccacactaa	atatgcta	taagatcatt	ggcaattctg	3120
tgggggctct	aggaaacctc	accttgggtg	tggccatcat	cgtcttcatt	tttgctgtgg	3180
tcggcatgca	gctctttgg	aagagctaca	aagaatgtgt	ctgcaagatc	aatgatgact	3240
gtacgctccc	acgggtggc	atgaacgact	tcttcactc	cttcctgatt	gtgttccgcg	3300
tgctgtgtgg	agagtggata	gagaccatgt	gggactgtat	ggaggtcgct	ggccaaacca	3360
tgtgccttat	tgttttcatg	ttgggtcatg	tcattggaaa	ccttgtgggt	ctgaacctct	3420
ttctggcctt	attgttgagt	tcatttagct	cagacaacct	tgctgctact	gatgatgaca	3480
atgaaatgaa	taatctgcag	attgcagtag	gaagaatgca	aaaggggaatt	gattatgtga	3540
aaaataagat	gcgggagtg	ttccaaaaag	ccttttttag	aaagccaaaa	gttatagaaa	3600
tccatgaagg	caataagata	gacagctgca	tgtccaataa	tactggaatt	gaaataagca	3660
aagagcttaa	ttatcttaga	gatgggaatg	gaaccaccag	tggtgtaggt	actggaagca	3720
gtgttgaaaa	atacgtaatc	gatgaaaatg	attatatgtc	attcataaac	aaccccagcc	3780
tcaccgtcac	agtccaatt	gctgttgag	agtctgactt	tgaaaactta	aatactgaag	3840
agttcagcag	tgagtcagaa	ctagaagaaa	gcaaggagaa	attaaatgca	accagctcat	3900
ctgaaggaag	cacagttgat	gttgttctac	cccgagaagg	tgaacaagct	gaaactgaac	3960
ccgaagaaga	ccttaaaccg	gaagcttggt	ttactgaagg	atgtattaaa	aagtttccat	4020
tctgtcaagt	aagtacagaa	gaaggcaaag	ggaagatctg	gtggaatctt	cgaaaaacct	4080
gctacagtat	tgttgagcac	aactggtttg	agactttcat	tgtgttcatg	atccttctca	4140
gtagtggtgc	attggccttt	gaagatatat	acattgaaca	gcgaaagact	atcaaaacca	4200
tgctagaata	tgctgacaaa	gtctttacct	atatattcat	tctggaaatg	cttctcaaat	4260
gggttgctta	tggatttcaa	acatatttca	ctaatgcctg	gtgctggcta	gatttcttga	4320
tcgttgatgt	ttctttgggt	agcctggtag	ccaatgctct	tggctactca	gaactcgggtg	4380
ccatcaaata	attacggaca	ttaagagctt	taagacctct	aagagcctta	tcccggtttg	4440
aaggcatgag	ggtggttg	aatgctcttg	ttggagcaat	tccctctatc	atgaatgtgc	4500
tgttggtctg	tctcatcttc	tggttgatct	ttagcatcat	gggtgtgaat	ttgtttgctg	4560
gcaagttcta	ccactgtgtt	aacatgacaa	cgggtaacat	gtttgacatt	agtgatgtta	4620
acaatttgag	tgactgtcag	gctcttggca	agcaagctcg	gtggaaaaac	gtgaaagtaa	4680
actttgataa	tgttggcgct	ggctatcttg	cactgcttca	agtggccaca	tttaaaggct	4740
ggatggatat	tatgtatgca	gctgttgatt	cacgagatgt	taaacttcag	cctgtatatg	4800

aagaaaatct	gtacatgtat	ttatactttg	tcacttttat	catctttggg	tcattcttca	4860
ctctgaatct	attcattggg	gtcatcatag	ataacttcaa	ccagcagaaa	aagaagtttg	4920
gaggtcaaga	catctttatg	acagaggaac	agaaaaata	ttacaatgca	atgaagaaac	4980
ttggatccaa	gaaacctcag	aaaccctatac	ctcgcccagc	aaacaaattc	caaggaatgg	5040
tctttgattt	tgtaaccaga	caagtctttg	atatcagcat	catgatcctc	atctgcctca	5100
acatggtcac	catgatggg	gaaacggatg	accagggcaa	atacatgacc	ctagttttgt	5160
cccggatcaa	cctagtgttc	attgttctgt	tcactggaga	atttgtgctg	aagctcgtct	5220
ccctcagaca	ctactacttc	actataggct	ggaacatctt	tgactttgtg	gtgggtgattc	5280
tctccattgt	aggtatgttt	ctggctgaga	tgatagaaaa	gtattttgtg	tcccctacct	5340
tgttccgagt	gatccgtctt	gccaggattg	gccgaatcct	acgtctgatc	aaaggagcaa	5400
aggggatccg	cacgctgctc	tttgctttga	tgatgtccct	tcctgcgttg	tttaacatcg	5460
gcctcctgct	cttcctggtc	atgtttatct	atgccatctt	tgggatgtcc	aactttgcct	5520
atgttaaaaa	ggaagctgga	attgatgaca	tgttcaactt	tgagaccttt	ggcaacagca	5580
tgatctgctt	gttccaaatt	acaacctctg	ctggatggga	tggattgcta	gcacctattc	5640
ttaatagtgc	accacccgac	tgtgaccctg	acacaattca	ccctggcagc	tcagttaagg	5700
gagactgtgg	gaacccatct	gttgggattt	tcttttttgt	cagttacatc	atcatatcct	5760
tcctggtggt	ggtgaacagt	tacatcgcg	tcactctgga	gaacttcagt	gttgctactg	5820
aagaaagtgc	agagcccctg	agtgaggatg	actttgagat	gttctatgag	gtttgggaaa	5880
agtttgatcc	cgatgcgacc	cagtttatag	agttctctaa	actctctgat	tttgcagctg	5940
ccctggatcc	tcctcttctc	atagcaaaac	ccaacaaagt	ccagcttatt	gccatggatc	6000
tgcccatgg	cagtgggtgac	cggatccact	gtcttgatat	tttatttgcc	tttaciaaagc	6060
gtgttttggg	tgagagtgga	gagatggatg	cccttcgaat	acagatggaa	gacaggttta	6120
tggcatcaaa	cccctccaaa	gtctcttatg	agcctattac	aaccactttg	aaacgtaaac	6180
aagaggaggt	gtctgccgct	atcattcagc	gtaatttcag	atgttatctt	ttaaagcaaa	6240
ggttaaaaaa	tatatcaagt	aactataaca	aagaggcaat	aaaggggagg	attgacttac	6300
ctataaaaca	agacatgatt	attgacaaac	tgaatgggaa	ctccactcca	gaaaaaacag	6360
atgggagttc	ctctaccacc	tctcctcctt	cctatgatag	tgtaacaaaa	ccagacaagg	6420
aaaagtttga	gaaagacaaa	ccagaaaaag	aaagcaaagg	aaaagaggtc	agagaaaatc	6480

aaaagtaaaa agaaacaaag aattatcttt gtgatcaatt gtttacagcc tatgaaggta	6540
aagtatatgt gtcaactgga cttcaagagg aggtccatgc caaactgact gttttaacaa	6600
atactcatag tcagtgccta tacaagacag tgaagtgacc tctctgtcac tgcaactctg	6660
tgaagcaggg tatcaacatt gacaagaggt tgctgttttt attaccagct gacactgctg	6720
aggagaaaacc caatggctac ctagactata gggatagttg tgcaaagtga acattgtaac	6780
tacaccaaac acctttagta cagtccttgc atccattcta tttttaactt ccatatctgc	6840
catattttta caaaatttgt tctagtgcac ttccatgggc cccaattcat agtttattca	6900
taatgctatg tcaactatfff tgtaaagtga gtttacgttg aagaaacagt atacaagaac	6960
cctgtctctc aaatgatcag acaaaggtgt tttgccagag agataaaaatt tttgctcaaa	7020
accagaaaaa gaattgtaat ggctacagtt tcagttactt ccatttttcta gatggcttta	7080
atthtgaaaag taththtagtc tghtatgttt gththctatct gaacagttat gtgcctgtaa	7140
agtctcctct aataththaa ggathththt tatgcaaagt attctgtttc agcaagtgca	7200
aaththtattc taagththcag agctctatat ttaaththagg tcaaatgctt tcaaaaaagt	7260
aatctaataa atccattcta gaaaaatata tctaaagtat tgctthtagaa tagththtcc	7320
actthctgct gcagththgc tthgccatct tctgctctca gcaaagctga tagthctatgt	7380
caathaaata ccctatgtta tgtaaatagt taththtatcc tgtggtgcat gththggcaa	7440
atatatatat agctgataa acaacttcta ttaaatcaaa tatgtaccac agthtatgtg	7500
tctthtgcaa gththcaaca gggatgtatc ctgtatcatt cattaaacat agththaaagg	7560
ctatcactaa tgcatgttaa taththctat gctgctctat ththtcaat ccaththtca	7620
caagththgg thaaagaatg tcacatattg gtgatagaat gaaththacc ththctgtcc	7680
attatgtcaa gcagaataat thgaagctat thacaaacac ththacttht gcactththaa	7740
thcaacatga gtatcatatg gtatctctct agaththcaag gaaacacact ggatactgcc	7800
tactgacaaa acctaththt catathththgc taaaaatatg tctaaaactt gcgcaaatat	7860
aaataatgta aaaatataat caactthtatt thgcagcatt thgtacataa gaaaattatt	7920
thcaggttga tgacatcaca aththththt ththtatgctt thgctththga thththaatca	7980
caaththcaa thththgaatc cataagattt thcaatggat aaththcctaa aataaaagtt	8040
agataatggg ththtatggat thththththt thaatathth ththaccattc caataggaga	8100
tacaththgtc aaacactcaa acctagatca thththtacca actatggthg cththaatata	8160
acctththtatt catagatgth ththththtatt caactththgt agthththacg tatgcagact	8220

agtcttattt	ttttaattcc	tgctgcacta	aagctattac	aaatataaca	tggactttgt	8280
tcttttttagc	catgaacaaa	gtggcaaaagt	tgtgcaatta	cctaacaatga	tataaatttt	8340
tgttttttg	acaaaccaa	agtttaaatgt	taattctttt	tacaaaacta	tttactgtag	8400
tgtattgaag	aactgcatgc	aggggaattgc	tattgctaaa	aagaatgggtg	agctacgtca	8460
ttattgagcc	aaaagaataa	atttcatttt	ttattgcatt	tcacttattg	gcctctgggg	8520
ttttttggtt	ttgttttttg	ctgttggcag	tttaaaatat	atataattaa	taaaacctgt	8580
gcttgatctg	acatttgtat	acataaaaagt	ttacatgaat	tttacaacag	actagtgc	8640
gattcaccaa	gcagtactac	agaacaaaagg	caaatgaaaa	gcagctttgt	gcacttttat	8700
gtgtgcaaag	gatcaagttc	acatgtttcca	actttcaggt	ttgataataa	tagtagtaac	8760
cacctacaat	agctttcaat	ttcaattaac	tccttgggt	ataagcatct	aaactcatct	8820
tctttcaata	taattgatgc	tatctcctaa	ttacttgggtg	gctaataaat	gttacattct	8880
ttgttactta	aatgcattat	ataaaactcct	atgtatacat	aaggtattaa	tgatatagtt	8940
attgagaatt	tatattaact	tttttttcaa	gaacccttgg	atttatgtga	ggtcaaaacc	9000
aaactcttat	tctcagtgg	aaactccagt	tgtaatgcat	atttttaaag	acaatttgg	9060
tctaaatatg	tatttcataa	ttctcccata	ataaattata	taaggtgggt	aa	9112

<210> 66

<211> 9112

<212> DNA

<213> Homo sapiens

<400> 66

accatagagt	gaatctcaga	acaggaagcg	gaggcataag	cagagaggat	tctggaaagg	60
tctctttggt	ttcttatcca	cagagaaaga	aagaaaaaaa	attgtaacta	atttgtaa	120
ctctgtggtc	aaaaaaaaa	aaaaaaaaa	aagctgaaca	gctgcagagg	aagacacgtt	180
ataccctaac	catcttggat	gctgggcttt	gttatgctgt	aattcataag	gctctgtttt	240
atcagagatt	atggagcaag	aaaactgaag	ccaagccaca	tcaagggttg	acagggatga	300
gatacctgtc	aaggattcat	agtagagtgg	cttactggga	aaggagcaaa	gaatctcttc	360
tagggatatt	gtaagaataa	atgagataat	tcacagaagg	gacctggagc	ttttccggaa	420
aaagggtgctg	tgactatcta	aggggaaaag	ctgagagtct	ggaactagcc	tatcttccga	480
ggacttagag	acaacagtat	gggaatttca	acgagacgtt	tttactttct	tttgaccaag	540
attcaaattc	tttattccag	cccttgataa	gtaaataaga	aggtaattcg	tatgcaagaa	600

gctacacgta attaaatgtg caggatgaaa agatggcaca ggcactgttg gtacccccag	660
gacctgaaaag cttccgcctt tttagtagag aatctcttgc tgctatcgaa aaacgtgctg	720
cagaagagaa agccaagaag cccaaaaagg aacaagataa tgatgatgag aacaaaccaa	780
agccaaatag tgacttggaa gctggaaaaga accttccatt tatttatgga gacattcctc	840
cagagatggg gtcagagccc ctggaggacc tggatcccta ctatatcaat aagaaaactt	900
ttatagtaat gaataaagga aaggcaattt cccgattcag tgccacctct gccttgtata	960
ttttaactcc actaaaccct gttaggaaaa ttgctabsaa gattttggta cattctttat	1020
tcagcatgct tatcatgtgc actattttga ccaactgtgt atttatgacc ttgagcaacc	1080
ctcctgactg gacaaagaat gtagagtaca cattcactgg aatctatacc tttgagtcac	1140
ttataaaaat cttggcaaga gggttttgct tagaagattt tacgtttctt cgtgatccat	1200
ggaactggct ggatttcagt gtcattgtga tggcgtatgt aacagaattt gtaagcctag	1260
gcaatgtttc agcccttcga actttcagag tcttgagagc tctgaaaact atttctgtaa	1320
tcccaggttt aaagaccatt gtggggggccc tgatccagtc ggtaaagaag ctttctgatg	1380
tgatgatcct gactgtgttc tgtctgagcg tgtttgctct cattgggctg cagctgttca	1440
tgggcaatct gaggaataaa tgtttgtagt ggcccccaag cgattctgct tttgaaacca	1500
acaccacttc ctactttaat ggcacaatgg attcaaatgg gacatttggt aatgtaacaa	1560
tgagcacatt taactggaag gattacattg gagatgacag tcacttttat gttttggatg	1620
ggcaaaaaga ccctttactc tgtggaaatg gctcagatgc aggccagtgt ccagaaggat	1680
acatctgtgt gaaggctggg cgaaacccca actatggcta cacaagcttt gacaccttta	1740
gctgggcttt cctgtctcta tttagactca tgactcaaga ctactgggaa aatctttacc	1800
agttgacatt acgtgctgct gggaaaacat acatgatatt ttttgcctg gtcattttct	1860
tgggctcatt ttatttggtg aatttgatcc tggctgtggg ggccatggcc tatgaggggc	1920
agaatcaggc caccttggaa gaagcagaac aaaaagaggc cgaatttcag cagatgctcg	1980
aacagcttaa aaagcaacag gaagaagctc aggcagttgc ggcagcatca gctgcttcaa	2040
gagatttcag tggaataggt gggttaggag agctgttggg aagttcttca gaagcatcaa	2100
agttgagttc caaaagtgt aaagaatgga ggaaccgaag gaagaaaaga agacagagag	2160
agcaccttga aggaaacaac aaaggagaga gagacagctt tcccaaattc gaatctgaag	2220
acagcgtcaa aagaagcagc ttccttttct ccatggatgg aaacagactg accagtgaca	2280

aaaaattctg ctcccccat cagtctctct tgagtatccg tggctccctg ttttcccaa	2340
gacgcaatag caaaacaagc attttcagtt tcagaggctg ggcaaaggat gttggatctg	2400
aaaatgactt tgctgatgat gaacacagca catttgaaga cagcgaaagc aggagagact	2460
cactgtttgt gccgcacaga catggagagc gacgcaacag taacggcacc accactgaaa	2520
cggaagtcag aaagagaagg ttaagctctt accagatttc aatggagatg ctggaggatt	2580
cctctggaag gcaaagagcc gtgagcatag ccagcattct gaccaacaca atggaagaac	2640
ttgaagaatc tagacagaaa tgtccgccat gctggtatag atttgccaat gtgttcttga	2700
tctgggactg ctgtgatgca tggttaaaag taaaacatct tgtgaattta attgttatgg	2760
atccatttgt tgatcttgcc atcactatct gcattgtctt aaataccctc tttatggcca	2820
tggagcacta ccccatgact gagcaattca gtagtgtgtt gactgtagga aacctggtct	2880
ttactgggat ttttacagca gaaatgggtc tcaagatcat tgccatggat cttattact	2940
atttccaaga aggctggaat atctttgatg gaattattgt cagcctcagt ttaatggagc	3000
ttggtctgtc aaatgtggag ggattgtctg tactgcatc attcagactg cttagagttt	3060
tcaagttggc aaaatcctgg cccacactaa atatgctaata taagatcatt ggcaattctg	3120
tgggggctct aggaaacctc accttgggtg tggccatcat cgtcttcatt tttgctgtgg	3180
tcggcatgca gctctttggt aagagctaca aagaatgtgt ctgcaagatc aatgatgact	3240
gtacgctccc acggtggcac atgaacgact tcttccactc cttcctgatt gtgttccgcg	3300
tgctgtgtgg agagtggata gagaccatgt gggactgtat ggaggctcgt ggccaaacca	3360
tgtgccttat tgttttcatg ttggtcatgg tcattggaaa ctttgtgggt ctgaacctct	3420
ttctggcctt attgttgagt tcatttagct cagacaacct tgctgctact gatgatgaca	3480
atgaaatgaa taatctgcag attgcagtag gaagaatgca aaaggaatt gattatgtga	3540
aaaataagat gcgggagtgt ttccaaaaag ctttttttag aaagccaaaa gttatagaaa	3600
tccatgaagg caataagata gacagctgca tgtccaataa tactggaatt gaaataagca	3660
aagagcttaa ttatcttaga gatgggaatg gaaccaccag tgggtgtaggt actggaagca	3720
gtgttgaaaa atacgtaatc gatgaaaatg attatatgtc attcataaac aacccagcc	3780
tcaccgtcac agtgccaatt gctgttggag agtctgactt tgaaaactta aatactgaag	3840
agttcagcag tgagtcagaa ctagaagaaa gcaaggagaa attaaatgca accagctcat	3900
ctgaaggaag cacagttgat gttgttctac cccgagaagg tgaacaagct gaaactgaac	3960
ccgaagaaga ccttaaaccg gaagcttgtt ttactgaagg atgtattaaa aagtttccat	4020

tctgtcaagt aagtacagaa gaaggcaaag ggaagatctg gtggaatctt cgaaaaacct	4080
gctacagtat tgttgagcac aactggtttg agactttcat tgtgttcatg atcctttctca	4140
gtagtggtgc attggccttt gaagatatat acattgaaca gcgaaagact atcaaaacca	4200
tgctagaata tgctgacaaa gtctttacct atatattcat tctggaaatg cttctcaa	4260
gggttgctta tggatttcaa acatatttca ctaatgcctg gtgctggcta gatttcttga	4320
tcgttgatgt ttctttgggt agcctggtag ccaatgctct tggctactca gaactcgggtg	4380
ccatcaaattc attacggaca ttaagagctt taagacctct aagagcctta tcccggtttg	4440
aaggcatgag ggtggttgtg aatgctcttg ttggagcaat tccctctatc atgaatgtgc	4500
tgttggctctg tctcatcttc tggttgatct ttagcatcat ggggtgtgaat ttgtttgctg	4560
gcaagttcta ccactgtgtt aacatgacaa cgggtaacat gtttgacatt agtgatgtta	4620
acaatttgag tgactgtcag gctcttggca agcaagctcg gtggaaaaac gtgaaagtaa	4680
actttgataa tgttggcgct ggctatcttg cactgcttca agtggccaca tttaaaggct	4740
ggatggatat tatgtatgca gctgttgatt cactgagatgt taaacttcag cctgtatatg	4800
aagaaaatct gtacatgtat ttatactttg tcatctttat catctttggg tcattcttca	4860
ctctgaatct attcattggg gtcacatag ataacttcaa ccagcagaaa aagaagtttg	4920
gaggtcaaga catctttatg acagaggaac agaaaaata ttacaatgca atgaagaaac	4980
ttggatccaa gaaacctcag aaaccctac ctcgccagc aaacaaattc caaggaatgg	5040
tctttgattt tgtaaccaga caagtctttg atatcagcat catgatcctc atctgcctca	5100
acatggtcac catgatgggt gaaacggatg accagggcaa atacatgacc ctagttttgt	5160
cccggatcaa cctagtgttc attgttctgt tcaactggaga atttgtgctg aagctcgtct	5220
ccctcagaca ctactacttc actataggct ggaacatctt tgactttgtg gtggtgatcc	5280
tctccattgt aggtatgttt ctggctgaga tgatagaaaa gtattttgtg tcccctacct	5340
tgttccgagt gatccgtctt gccaggattg gccgaatcct acgtctgatc aaaggagcaa	5400
aggggatccg cactgtgctc ttgtctttga tgatgtccct tcctgcgttg tttaacatcg	5460
gcctcctgct cttcctgggt atgtttatct atgccatctt tgggatgtcc aactttgcct	5520
atgttaaaaa ggaagctgga attgatgaca tgttcaactt tgagaccttt ggcaacagca	5580
tgatctgctt gttccaaatt acaacctctg ctggatggga tggattgcta gcacctattc	5640
ttaatagtgc accaccgcac tgtgaccctg acacaattca ccctggcagc tcagttaagg	5700

gagactgtgg	gaacccatct	gttgggattt	tcttttttgt	cagttacatc	atcatatcct	5760
tcctgggtgg	ggtgaacagt	tacatcgcg	tcctcctgga	gaacttcagt	gttgctactg	5820
aagaaagtgc	agagcccctg	agtgaggatg	actttgagat	gttctatgag	gtttgggaaa	5880
agtttgatcc	cgatgcgacc	cagtttatag	agttctctaa	actctctgat	tttgcagctg	5940
ccctggatcc	tcctcttctc	atagcaaaac	ccaacaaagt	ccagcttatt	gccatggatc	6000
tgcccatgg	cagtgggtgac	cggatccact	gtcttgatat	tttatttgcc	tttacaaagc	6060
gtgttttggg	tgagagtggg	gagatggatg	cccttcgaat	acagatggaa	gacaggttta	6120
tggcatcaaa	cccctccaaa	gtctcttatg	agcctattac	aaccactttg	aaacgtaaac	6180
aagaggaggt	gtctgccgct	atcattcagc	gtaatttcag	atgttatctt	ttaaagcaaa	6240
ggttaaaaaa	tatatcaagt	aactataaca	aagaggcaat	aaaggggagg	attgacttac	6300
ctataaaaca	agacatgatt	attgacaaac	tgaatgggaa	ctccactcca	gaaaaaacag	6360
atgggagttc	ctctaccacc	tctcctcctt	cctatgatag	tgtaacaaaa	ccagacaagg	6420
aaaagtttga	gaaagacaaa	ccagaaaaag	aaagcaaagg	aaaagaggtc	agagaaaatc	6480
aaaagtaaaa	agaaacaaag	aattatcttt	gtgatcaatt	gtttacagcc	tatgaaggta	6540
aagtatatgt	gtcaactgga	cttcaagagg	aggtccatgc	caaactgact	gttttaacaa	6600
atactcatag	tcagtgccta	tacaagacag	tgaagtgacc	tctctgtcac	tgcaactctg	6660
tgaagcagg	tatcaacatt	gacaagaggt	tgctgttttt	attaccagct	gacactgctg	6720
aggagaaacc	caatggctac	ctagactata	gggatagttg	tgcaaagtga	acattgtaac	6780
tacaccaaac	accttttagta	cagtccttgc	atccattcta	tttttaactt	ccatatctgc	6840
catattttta	caaaatttgt	tctagtgcac	ttccatggtc	cccaattcat	agttttattca	6900
taatgctatg	tcactatttt	tgtaaatgag	gtttacgttg	aagaaacagt	atacaagaac	6960
cctgtctctc	aatgatcag	acaaagggtg	tttgccagag	agataaaatt	tttgctcaaa	7020
accagaaaaa	gaattgtaat	ggctacagtt	tcagttactt	ccatttttcta	gatggcttta	7080
attttgaaag	tatttttagtc	tggtatgttt	gtttctatct	gaacagttat	gtgcctgtaa	7140
agtctcctct	aatatttaaa	ggattatttt	tatgcaaagt	attctgtttc	agcaagtgca	7200
aattttattc	taagtttcag	agctctatat	ttaatttagg	tcaaagtctt	tccaaaaagt	7260
aatctaataa	atccattcta	gaaaaatata	tctaaagtat	tgcttttagaa	tagttgttcc	7320
actttctgct	gcagtattgc	tttgccatct	tctgctctca	gcaaagctga	tagtctatgt	7380
caattaaata	ccctatgtta	tgtaaatagt	tattttatcc	tgtgggtgcat	gtttgggcaa	7440

atatatatat agcctgataa acaacttcta ttaaatacaaa tatgtaccac agtgtatgtg	7500
tcttttgcaa gcttccaaca gggatgtatc ctgtatcatt cattaaacat agtttaaagg	7560
ctatcactaa tgcattgttaa tattgcctat gctgctctat tttactcaat ccattcttca	7620
caagtcttgg ttaaagaatg tcacatattg gtgatagaat gaattcaacc tgctctgtcc	7680
attatgtcaa gcagaataat ttgaagctat ttacaaacac ctttactttt gcacttttaa	7740
ttcaacatga gtatcatatg gtatctctct agatttcaag gaaacacact ggatactgcc	7800
tactgacaaa acctattctt catattttgc taaaaatatg tctaaaactt gcgcaaatat	7860
aaataatgta aaaatataat caactttatt tgtcagcatt ttgtacataa gaaaattatt	7920
ttcagggtga tgacatcaca atttatttta ctttatgctt ttgcttttga tttttaatca	7980
caattccaaa cttttgaatc cataagattt ttcaatggat aatttcctaa aataaaaagt	8040
agataatggg ttttatggat ttctttgtta taatatattt tctaccattc caataggaga	8100
tacattggtc aaacactcaa acctagatca ttttctacca actatgggtg cctcaatata	8160
accttttatt catagatggt tttttttatt caacttttgt agtatttacg tatgcagact	8220
agtcttattt ttttaattcc tgctgcacta aagctattac aaatataaca tggactttgt	8280
tcttttttagc catgaacaaa gtggcaaagt tgtgcaatta cctaacaatga tataaatttt	8340
tgttttttgc acaaaccaa agtttaatgt taattctttt tacaaaacta tttactgtag	8400
tgtattgaag aactgcatgc agggaattgc tattgctaaa aagaatgggtg agctacgtca	8460
ttattgagcc aaaagaataa atttcatttt ttattgcatt tcacttattg gcctctgggg	8520
ttttttgttt ttgttttttg ctgttggcag tttaaaatat atataattaa taaaacctgt	8580
gcttgatctg acatttgtat acataaaaagt ttacatgaat ttacaacag actagtgcac	8640
gattcaccaa gcagtactac agaacaaagg caaatgaaaa gcagctttgt gcacttttat	8700
gtgtgcaaag gatcaagttc acatgttcca actttcaggt ttgataataa tagtagtaac	8760
cacctacaat agctttcaat ttcaattaac tcccttggct ataagcatct aaactcatct	8820
tctttcaata taattgatgc tatctcctaa ttacttgggtg gctaataaat gttacattct	8880
ttgttactta aatgcattat ataaactcct atgtatacat aaggatttaa tgatatagtt	8940
attgagaatt tatattaact tttttttcaa gaacccttgg atttatgtga ggtcaaaacc	9000
aaactcttat tctcagtgga aaactccagt tgtaatgcat attttttaaag acaatttggg	9060
tctaaatatg tatttcataa ttctcccata ataaattata taagggtggct aa	9112

<210> 67
<211> 1951
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (122)..(122)
<223> Xaa = any amino acid

<400> 67

Met Ala Gln Ala Leu Leu Val Pro Pro Gly Pro Glu Ser Phe Arg Leu
1 5 10 15

Phe Thr Arg Glu Ser Leu Ala Ala Ile Glu Lys Arg Ala Ala Glu Glu
20 25 30

Lys Ala Lys Lys Pro Lys Lys Glu Gln Asp Asn Asp Asp Glu Asn Lys
35 40 45

Pro Lys Pro Asn Ser Asp Leu Glu Ala Gly Lys Asn Leu Pro Phe Ile
50 55 60

Tyr Gly Asp Ile Pro Pro Glu Met Val Ser Glu Pro Leu Glu Asp Leu
65 70 75 80

Asp Pro Tyr Tyr Ile Asn Lys Lys Thr Phe Ile Val Met Asn Lys Gly
85 90 95

Lys Ala Ile Ser Arg Phe Ser Ala Thr Ser Ala Leu Tyr Ile Leu Thr
100 105 110

Pro Leu Asn Pro Val Arg Lys Ile Ala Xaa Lys Ile Leu Val His Ser
115 120 125

Leu Phe Ser Met Leu Ile Met Cys Thr Ile Leu Thr Asn Cys Val Phe
130 135 140

Met Thr Leu Ser Asn Pro Pro Asp Trp Thr Lys Asn Val Glu Tyr Thr
145 150 155 160

Phe Thr Gly Ile Tyr Thr Phe Glu Ser Leu Ile Lys Ile Leu Ala Arg
165 170 175

Gly Phe Cys Leu Glu Asp Phe Thr Phe Leu Arg Asp Pro Trp Asn Trp
180 185 190

Leu Asp Phe Ser Val Ile Val Met Ala Tyr Val Thr Glu Phe Val Asp
195 200 205

Leu Gly Asn Val Ser Ala Leu Arg Thr Phe Arg Val Leu Arg Ala Leu
210 215 220

Lys Thr Ile Ser Val Ile Pro Gly Leu Lys Thr Ile Val Gly Ala Leu
225 230 235 240

Ile Gln Ser Val Lys Lys Leu Ser Asp Val Met Ile Leu Thr Val Phe
245 250 255

Cys Leu Ser Val Phe Ala Leu Ile Gly Leu Gln Leu Phe Met Gly Asn
260 265 270

Leu Arg Asn Lys Cys Leu Gln Trp Pro Pro Ser Asp Ser Ala Phe Glu
275 280 285

Thr Asn Thr Thr Ser Tyr Phe Asn Gly Thr Met Asp Ser Asn Gly Thr
290 295 300

Phe Val Asn Val Thr Met Ser Thr Phe Asn Trp Lys Asp Tyr Ile Gly
305 310 315 320

Asp Asp Ser His Phe Tyr Val Leu Asp Gly Gln Lys Asp Pro Leu Leu
325 330 335

Cys Gly Asn Gly Ser Asp Ala Gly Gln Cys Pro Glu Gly Tyr Ile Cys
340 345 350

Val Lys Ala Gly Arg Asn Pro Asn Tyr Gly Tyr Thr Ser Phe Asp Thr
355 360 365

Phe Ser Trp Ala Phe Leu Ser Leu Phe Arg Leu Met Thr Gln Asp Tyr
370 375 380

Trp Glu Asn Leu Tyr Gln Leu Thr Leu Arg Ala Ala Gly Lys Thr Tyr
385 390 395 400

Met Ile Phe Phe Val Leu Val Ile Phe Leu Gly Ser Phe Tyr Leu Val
405 410 415

Asn Leu Ile Leu Ala Val Val Ala Met Ala Tyr Glu Gly Gln Asn Gln
420 425 430

Ala Thr Leu Glu Glu Ala Glu Gln Lys Glu Ala Glu Phe Gln Gln Met
435 440 445

Leu Glu Gln Leu Lys Lys Gln Gln Glu Glu Ala Gln Ala Val Ala Ala
450 455 460

Ala Ser Ala Ala Ser Arg Asp Phe Ser Gly Ile Gly Gly Leu Gly Glu
465 470 475 480

Leu Leu Glu Ser Ser Ser Glu Ala Ser Lys Leu Ser Ser Lys Ser Ala
485 490 495

Lys Glu Trp Arg Asn Arg Arg Lys Lys Arg Arg Gln Arg Glu His Leu
500 505 510

Glu Gly Asn Asn Lys Gly Glu Arg Asp Ser Phe Pro Lys Ser Glu Ser
515 520 525

Glu Asp Ser Val Lys Arg Ser Ser Phe Leu Phe Ser Met Asp Gly Asn
530 535 540

Arg Leu Thr Ser Asp Lys Lys Phe Cys Ser Pro His Gln Ser Leu Leu
545 550 555 560

Ser Ile Arg Gly Ser Leu Phe Ser Pro Arg Arg Asn Ser Lys Thr Ser
565 570 575

Ile Phe Ser Phe Arg Gly Arg Ala Lys Asp Val Gly Ser Glu Asn Asp
580 585 590

Phe Ala Asp Asp Glu His Ser Thr Phe Glu Asp Ser Glu Ser Arg Arg
595 600 605

Asp Ser Leu Phe Val Pro His Arg His Gly Glu Arg Arg Asn Ser Asn
610 615 620

Gly Thr Thr Thr Glu Thr Glu Val Arg Lys Arg Arg Leu Ser Ser Tyr

625		630		635		640
Gln Ile Ser Met	Glu Met Leu Glu Asp	Ser Ser Gly Arg	Gln Arg Ala			
	645	650	655			
Val Ser Ile Ala Ser Ile Leu Thr	Asn Thr Met Glu Glu Leu Glu Glu					
	660	665	670			
Ser Arg Gln Lys Cys Pro Pro Cys Trp Tyr Arg Phe Ala Asn Val Phe						
	675	680	685			
Leu Ile Trp Asp Cys Cys Asp Ala Trp Leu Lys Val Lys His Leu Val						
	690	695	700			
Asn Leu Ile Val Met Asp Pro Phe Val Asp Leu Ala Ile Thr Ile Cys						
	705	710	715			720
Ile Val Leu Asn Thr Leu Phe Met Ala Met Glu His Tyr Pro Met Thr						
	725	730	735			
Glu Gln Phe Ser Ser Val Leu Thr Val Gly Asn Leu Val Phe Thr Gly						
	740	745	750			
Ile Phe Thr Ala Glu Met Val Leu Lys Ile Ile Ala Met Asp Pro Tyr						
	755	760	765			
Tyr Tyr Phe Gln Glu Gly Trp Asn Ile Phe Asp Gly Ile Ile Val Ser						
	770	775	780			
Leu Ser Leu Met Glu Leu Gly Leu Ser Asn Val Glu Gly Leu Ser Val						
	785	790	795			800
Leu Arg Ser Phe Arg Leu Leu Arg Val Phe Lys Leu Ala Lys Ser Trp						
	805	810	815			
Pro Thr Leu Asn Met Leu Ile Lys Ile Ile Gly Asn Ser Val Gly Ala						
	820	825	830			
Leu Gly Asn Leu Thr Leu Val Leu Ala Ile Ile Val Phe Ile Phe Ala						
	835	840	845			
Val Val Gly Met Gln Leu Phe Gly Lys Ser Tyr Lys Glu Cys Val Cys						
	850	855	860			

Lys Ile Asn Asp Asp Cys Thr Leu Pro Arg Trp His Met Asn Asp Phe
865 870 875 880

Phe His Ser Phe Leu Ile Val Phe Arg Val Leu Cys Gly Glu Trp Ile
885 890 895

Glu Thr Met Trp Asp Cys Met Glu Val Ala Gly Gln Thr Met Cys Leu
900 905 910

Ile Val Phe Met Leu Val Met Val Ile Gly Asn Leu Val Val Leu Asn
915 920 925

Leu Phe Leu Ala Leu Leu Leu Ser Ser Phe Ser Ser Asp Asn Leu Ala
930 935 940

Ala Thr Asp Asp Asp Asn Glu Met Asn Asn Leu Gln Ile Ala Val Gly
945 950 955 960

Arg Met Gln Lys Gly Ile Asp Tyr Val Lys Asn Lys Met Arg Glu Cys
965 970 975

Phe Gln Lys Ala Phe Phe Arg Lys Pro Lys Val Ile Glu Ile His Glu
980 985 990

Gly Asn Lys Ile Asp Ser Cys Met Ser Asn Asn Thr Gly Ile Glu Ile
995 1000 1005

Ser Lys Glu Leu Asn Tyr Leu Arg Asp Gly Asn Gly Thr Thr Ser
1010 1015 1020

Gly Val Gly Thr Gly Ser Ser Val Glu Lys Tyr Val Ile Asp Glu
1025 1030 1035

Asn Asp Tyr Met Ser Phe Ile Asn Asn Pro Ser Leu Thr Val Thr
1040 1045 1050

Val Pro Ile Ala Val Gly Glu Ser Asp Phe Glu Asn Leu Asn Thr
1055 1060 1065

Glu Glu Phe Ser Ser Glu Ser Glu Leu Glu Glu Ser Lys Glu Lys
1070 1075 1080

Leu	Asn	Ala	Thr	Ser	Ser	Ser	Glu	Gly	Ser	Thr	Val	Asp	Val	Val
1085							1090				1095			
Leu	Pro	Arg	Glu	Gly	Glu	Gln	Ala	Glu	Thr	Glu	Pro	Glu	Glu	Asp
1100						1105					1110			
Leu	Lys	Pro	Glu	Ala	Cys	Phe	Thr	Glu	Gly	Cys	Ile	Lys	Lys	Phe
1115						1120					1125			
Pro	Phe	Cys	Gln	Val	Ser	Thr	Glu	Glu	Gly	Lys	Gly	Lys	Ile	Trp
1130						1135					1140			
Trp	Asn	Leu	Arg	Lys	Thr	Cys	Tyr	Ser	Ile	Val	Glu	His	Asn	Trp
1145						1150					1155			
Phe	Glu	Thr	Phe	Ile	Val	Phe	Met	Ile	Leu	Leu	Ser	Ser	Gly	Ala
1160						1165					1170			
Leu	Ala	Phe	Glu	Asp	Ile	Tyr	Ile	Glu	Gln	Arg	Lys	Thr	Ile	Lys
1175						1180					1185			
Thr	Met	Leu	Glu	Tyr	Ala	Asp	Lys	Val	Phe	Thr	Tyr	Ile	Phe	Ile
1190						1195					1200			
Leu	Glu	Met	Leu	Leu	Lys	Trp	Val	Ala	Tyr	Gly	Phe	Gln	Thr	Tyr
1205						1210					1215			
Phe	Thr	Asn	Ala	Trp	Cys	Trp	Leu	Asp	Phe	Leu	Ile	Val	Asp	Val
1220						1225					1230			
Ser	Leu	Val	Ser	Leu	Val	Ala	Asn	Ala	Leu	Gly	Tyr	Ser	Glu	Leu
1235						1240					1245			
Gly	Ala	Ile	Lys	Ser	Leu	Arg	Thr	Leu	Arg	Ala	Leu	Arg	Pro	Leu
1250						1255					1260			
Arg	Ala	Leu	Ser	Arg	Phe	Glu	Gly	Met	Arg	Val	Val	Val	Asn	Ala
1265						1270					1275			
Leu	Val	Gly	Ala	Ile	Pro	Ser	Ile	Met	Asn	Val	Leu	Leu	Val	Cys
1280						1285					1290			

Leu Ile Phe Trp Leu Ile Phe Ser Ile Met Gly Val Asn Leu Phe
1295 1300 1305

Ala Gly Lys Phe Tyr His Cys Val Asn Met Thr Thr Gly Asn Met
1310 1315 1320

Phe Asp Ile Ser Asp Val Asn Asn Leu Ser Asp Cys Gln Ala Leu
1325 1330 1335

Gly Lys Gln Ala Arg Trp Lys Asn Val Lys Val Asn Phe Asp Asn
1340 1345 1350

Val Gly Ala Gly Tyr Leu Ala Leu Leu Gln Val Ala Thr Phe Lys
1355 1360 1365

Gly Trp Met Asp Ile Met Tyr Ala Ala Val Asp Ser Arg Asp Val
1370 1375 1380

Lys Leu Gln Pro Val Tyr Glu Glu Asn Leu Tyr Met Tyr Leu Tyr
1385 1390 1395

Phe Val Ile Phe Ile Ile Phe Gly Ser Phe Phe Thr Leu Asn Leu
1400 1405 1410

Phe Ile Gly Val Ile Ile Asp Asn Phe Asn Gln Gln Lys Lys Lys
1415 1420 1425

Phe Gly Gly Gln Asp Ile Phe Met Thr Glu Glu Gln Lys Lys Tyr
1430 1435 1440

Tyr Asn Ala Met Lys Lys Leu Gly Ser Lys Lys Pro Gln Lys Pro
1445 1450 1455

Ile Pro Arg Pro Ala Asn Lys Phe Gln Gly Met Val Phe Asp Phe
1460 1465 1470

Val Thr Arg Gln Val Phe Asp Ile Ser Ile Met Ile Leu Ile Cys
1475 1480 1485

Leu Asn Met Val Thr Met Met Val Glu Thr Asp Asp Gln Gly Lys
1490 1495 1500

Tyr Met Thr Leu Val Leu Ser Arg Ile Asn Leu Val Phe Ile Val

1505		1510		1515
Leu Phe Thr Gly Glu Phe Val	Leu Lys Leu Val Ser	Leu Arg His		
1520	1525	1530		
Tyr Tyr Phe Thr Ile Gly Trp	Asn Ile Phe Asp Phe	Val Val Val		
1535	1540	1545		
Ile Leu Ser Ile Val Gly Met	Phe Leu Ala Glu Met	Ile Glu Lys		
1550	1555	1560		
Tyr Phe Val Ser Pro Thr Leu	Phe Arg Val Ile Arg	Leu Ala Arg		
1565	1570	1575		
Ile Gly Arg Ile Leu Arg Leu	Ile Lys Gly Ala Lys	Gly Ile Arg		
1580	1585	1590		
Thr Leu Leu Phe Ala Leu Met	Met Ser Leu Pro Ala	Leu Phe Asn		
1595	1600	1605		
Ile Gly Leu Leu Leu Phe Leu	Val Met Phe Ile Tyr	Ala Ile Phe		
1610	1615	1620		
Gly Met Ser Asn Phe Ala Tyr	Val Lys Lys Glu Ala	Gly Ile Asp		
1625	1630	1635		
Asp Met Phe Asn Phe Glu Thr	Phe Gly Asn Ser Met	Ile Cys Leu		
1640	1645	1650		
Phe Gln Ile Thr Thr Ser Ala	Gly Trp Asp Gly Leu	Leu Ala Pro		
1655	1660	1665		
Ile Leu Asn Ser Ala Pro Pro	Asp Cys Asp Pro Asp	Thr Ile His		
1670	1675	1680		
Pro Gly Ser Ser Val Lys Gly	Asp Cys Gly Asn Pro	Ser Val Gly		
1685	1690	1695		
Ile Phe Phe Phe Val Ser Tyr	Ile Ile Ile Ser Phe	Leu Val Val		
1700	1705	1710		
Val Asn Ser Tyr Ile Ala Val	Ile Leu Glu Asn Phe	Ser Val Ala		
1715	1720	1725		

Thr Glu Glu Ser Ala Glu Pro Leu Ser Glu Asp Asp Phe Glu Met
1730 1735 1740

Phe Tyr Glu Val Trp Glu Lys Phe Asp Pro Asp Ala Thr Gln Phe
1745 1750 1755

Ile Glu Phe Ser Lys Leu Ser Asp Phe Ala Ala Ala Leu Asp Pro
1760 1765 1770

Pro Leu Leu Ile Ala Lys Pro Asn Lys Val Gln Leu Ile Ala Met
1775 1780 1785

Asp Leu Pro Met Val Ser Gly Asp Arg Ile His Cys Leu Asp Ile
1790 1795 1800

Leu Phe Ala Phe Thr Lys Arg Val Leu Gly Glu Ser Gly Glu Met
1805 1810 1815

Asp Ala Leu Arg Ile Gln Met Glu Asp Arg Phe Met Ala Ser Asn
1820 1825 1830

Pro Ser Lys Val Ser Tyr Glu Pro Ile Thr Thr Thr Leu Lys Arg
1835 1840 1845

Lys Gln Glu Glu Val Ser Ala Ala Ile Ile Gln Arg Asn Phe Arg
1850 1855 1860

Cys Tyr Leu Leu Lys Gln Arg Leu Lys Asn Ile Ser Ser Asn Tyr
1865 1870 1875

Asn Lys Glu Ala Ile Lys Gly Arg Ile Asp Leu Pro Ile Lys Gln
1880 1885 1890

Asp Met Ile Ile Asp Lys Leu Asn Gly Asn Ser Thr Pro Glu Lys
1895 1900 1905

Thr Asp Gly Ser Ser Ser Thr Thr Ser Pro Pro Ser Tyr Asp Ser
1910 1915 1920

Val Thr Lys Pro Asp Lys Glu Lys Phe Glu Lys Asp Lys Pro Glu
1925 1930 1935

Lys Glu Ser Lys Gly Lys Glu Val Arg Glu Asn Gln Lys
1940 1945 1950

<210> 68
<211> 1951
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (122)..(122)
<223> Xaa = any amino acid

<400> 68

Met Ala Gln Ala Leu Leu Val Pro Pro Gly Pro Glu Ser Phe Arg Leu
1 5 10 15

Phe Thr Arg Glu Ser Leu Ala Ala Ile Glu Lys Arg Ala Ala Glu Glu
20 25 30

Lys Ala Lys Lys Pro Lys Lys Glu Gln Asp Asn Asp Asp Glu Asn Lys
35 40 45

Pro Lys Pro Asn Ser Asp Leu Glu Ala Gly Lys Asn Leu Pro Phe Ile
50 55 60

Tyr Gly Asp Ile Pro Pro Glu Met Val Ser Glu Pro Leu Glu Asp Leu
65 70 75 80

Asp Pro Tyr Tyr Ile Asn Lys Lys Thr Phe Ile Val Met Asn Lys Gly
85 90 95

Lys Ala Ile Ser Arg Phe Ser Ala Thr Ser Ala Leu Tyr Ile Leu Thr
100 105 110

Pro Leu Asn Pro Val Arg Lys Ile Ala Xaa Lys Ile Leu Val His Ser
115 120 125

Leu Phe Ser Met Leu Ile Met Cys Thr Ile Leu Thr Asn Cys Val Phe
130 135 140

Met Thr Leu Ser Asn Pro Pro Asp Trp Thr Lys Asn Val Glu Tyr Thr
145 150 155 160

Phe Thr Gly Ile Tyr Thr Phe Glu Ser Leu Ile Lys Ile Leu Ala Arg
165 170 175

Gly Phe Cys Leu Glu Asp Phe Thr Phe Leu Arg Asp Pro Trp Asn Trp
180 185 190

Leu Asp Phe Ser Val Ile Val Met Ala Tyr Val Thr Glu Phe Val Ser
195 200 205

Leu Gly Asn Val Ser Ala Leu Arg Thr Phe Arg Val Leu Arg Ala Leu
210 215 220

Lys Thr Ile Ser Val Ile Pro Gly Leu Lys Thr Ile Val Gly Ala Leu
225 230 235 240

Ile Gln Ser Val Lys Lys Leu Ser Asp Val Met Ile Leu Thr Val Phe
245 250 255

Cys Leu Ser Val Phe Ala Leu Ile Gly Leu Gln Leu Phe Met Gly Asn
260 265 270

Leu Arg Asn Lys Cys Leu Gln Trp Pro Pro Ser Asp Ser Ala Phe Glu
275 280 285

Thr Asn Thr Thr Ser Tyr Phe Asn Gly Thr Met Asp Ser Asn Gly Thr
290 295 300

Phe Val Asn Val Thr Met Ser Thr Phe Asn Trp Lys Asp Tyr Ile Gly
305 310 315 320

Asp Asp Ser His Phe Tyr Val Leu Asp Gly Gln Lys Asp Pro Leu Leu
325 330 335

Cys Gly Asn Gly Ser Asp Ala Gly Gln Cys Pro Glu Gly Tyr Ile Cys
340 345 350

Val Lys Ala Gly Arg Asn Pro Asn Tyr Gly Tyr Thr Ser Phe Asp Thr
355 360 365

Phe Ser Trp Ala Phe Leu Ser Leu Phe Arg Leu Met Thr Gln Asp Tyr
370 375 380

Trp Glu Asn Leu Tyr Gln Leu Thr Leu Arg Ala Ala Gly Lys Thr Tyr
385 390 395 400

Met Ile Phe Phe Val Leu Val Ile Phe Leu Gly Ser Phe Tyr Leu Val
405 410 415

Asn Leu Ile Leu Ala Val Val Ala Met Ala Tyr Glu Gly Gln Asn Gln
420 425 430

Ala Thr Leu Glu Glu Ala Glu Gln Lys Glu Ala Glu Phe Gln Gln Met
435 440 445

Leu Glu Gln Leu Lys Lys Gln Gln Glu Glu Ala Gln Ala Val Ala Ala
450 455 460

Ala Ser Ala Ala Ser Arg Asp Phe Ser Gly Ile Gly Gly Leu Gly Glu
465 470 475 480

Leu Leu Glu Ser Ser Ser Glu Ala Ser Lys Leu Ser Ser Lys Ser Ala
485 490 495

Lys Glu Trp Arg Asn Arg Arg Lys Lys Arg Arg Gln Arg Glu His Leu
500 505 510

Glu Gly Asn Asn Lys Gly Glu Arg Asp Ser Phe Pro Lys Ser Glu Ser
515 520 525

Glu Asp Ser Val Lys Arg Ser Ser Phe Leu Phe Ser Met Asp Gly Asn
530 535 540

Arg Leu Thr Ser Asp Lys Lys Phe Cys Ser Pro His Gln Ser Leu Leu
545 550 555 560

Ser Ile Arg Gly Ser Leu Phe Ser Pro Arg Arg Asn Ser Lys Thr Ser
565 570 575

Ile Phe Ser Phe Arg Gly Arg Ala Lys Asp Val Gly Ser Glu Asn Asp
580 585 590

Phe Ala Asp Asp Glu His Ser Thr Phe Glu Asp Ser Glu Ser Arg Arg
595 600 605

Asp Ser Leu Phe Val Pro His Arg His Gly Glu Arg Arg Asn Ser Asn

610					615					620					
Gly	Thr	Thr	Thr	Glu	Thr	Glu	Val	Arg	Lys	Arg	Arg	Leu	Ser	Ser	Tyr
625					630					635					640
Gln	Ile	Ser	Met	Glu	Met	Leu	Glu	Asp	Ser	Ser	Gly	Arg	Gln	Arg	Ala
				645					650					655	
Val	Ser	Ile	Ala	Ser	Ile	Leu	Thr	Asn	Thr	Met	Glu	Glu	Leu	Glu	Glu
			660					665					670		
Ser	Arg	Gln	Lys	Cys	Pro	Pro	Cys	Trp	Tyr	Arg	Phe	Ala	Asn	Val	Phe
			675					680				685			
Leu	Ile	Trp	Asp	Cys	Cys	Asp	Ala	Trp	Leu	Lys	Val	Lys	His	Leu	Val
	690					695					700				
Asn	Leu	Ile	Val	Met	Asp	Pro	Phe	Val	Asp	Leu	Ala	Ile	Thr	Ile	Cys
705					710					715					720
Ile	Val	Leu	Asn	Thr	Leu	Phe	Met	Ala	Met	Glu	His	Tyr	Pro	Met	Thr
			725						730					735	
Glu	Gln	Phe	Ser	Ser	Val	Leu	Thr	Val	Gly	Asn	Leu	Val	Phe	Thr	Gly
			740					745					750		
Ile	Phe	Thr	Ala	Glu	Met	Val	Leu	Lys	Ile	Ile	Ala	Met	Asp	Pro	Tyr
		755					760					765			
Tyr	Tyr	Phe	Gln	Glu	Gly	Trp	Asn	Ile	Phe	Asp	Gly	Ile	Ile	Val	Ser
	770					775					780				
Leu	Ser	Leu	Met	Glu	Leu	Gly	Leu	Ser	Asn	Val	Glu	Gly	Leu	Ser	Val
785					790					795					800
Leu	Arg	Ser	Phe	Arg	Leu	Leu	Arg	Val	Phe	Lys	Leu	Ala	Lys	Ser	Trp
				805					810					815	
Pro	Thr	Leu	Asn	Met	Leu	Ile	Lys	Ile	Ile	Gly	Asn	Ser	Val	Gly	Ala
			820					825					830		
Leu	Gly	Asn	Leu	Thr	Leu	Val	Leu	Ala	Ile	Ile	Val	Phe	Ile	Phe	Ala
	835					840						845			

Val Val Gly Met Gln Leu Phe Gly Lys Ser Tyr Lys Glu Cys Val Cys
850 855 860

Lys Ile Asn Asp Asp Cys Thr Leu Pro Arg Trp His Met Asn Asp Phe
865 870 875 880

Phe His Ser Phe Leu Ile Val Phe Arg Val Leu Cys Gly Glu Trp Ile
885 890 895

Glu Thr Met Trp Asp Cys Met Glu Val Ala Gly Gln Thr Met Cys Leu
900 905 910

Ile Val Phe Met Leu Val Met Val Ile Gly Asn Leu Val Val Leu Asn
915 920 925

Leu Phe Leu Ala Leu Leu Leu Ser Ser Phe Ser Ser Asp Asn Leu Ala
930 935 940

Ala Thr Asp Asp Asp Asn Glu Met Asn Asn Leu Gln Ile Ala Val Gly
945 950 955 960

Arg Met Gln Lys Gly Ile Asp Tyr Val Lys Asn Lys Met Arg Glu Cys
965 970 975

Phe Gln Lys Ala Phe Phe Arg Lys Pro Lys Val Ile Glu Ile His Glu
980 985 990

Gly Asn Lys Ile Asp Ser Cys Met Ser Asn Asn Thr Gly Ile Glu Ile
995 1000 1005

Ser Lys Glu Leu Asn Tyr Leu Arg Asp Gly Asn Gly Thr Thr Ser
1010 1015 1020

Gly Val Gly Thr Gly Ser Ser Val Glu Lys Tyr Val Ile Asp Glu
1025 1030 1035

Asn Asp Tyr Met Ser Phe Ile Asn Asn Pro Ser Leu Thr Val Thr
1040 1045 1050

Val Pro Ile Ala Val Gly Glu Ser Asp Phe Glu Asn Leu Asn Thr
1055 1060 1065

Glu	Glu	Phe	Ser	Ser	Glu	Ser	Glu	Leu	Glu	Glu	Ser	Lys	Glu	Lys
1070						1075					1080			
Leu	Asn	Ala	Thr	Ser	Ser	Ser	Glu	Gly	Ser	Thr	Val	Asp	Val	Val
1085						1090					1095			
Leu	Pro	Arg	Glu	Gly	Glu	Gln	Ala	Glu	Thr	Glu	Pro	Glu	Glu	Asp
1100						1105					1110			
Leu	Lys	Pro	Glu	Ala	Cys	Phe	Thr	Glu	Gly	Cys	Ile	Lys	Lys	Phe
1115						1120					1125			
Pro	Phe	Cys	Gln	Val	Ser	Thr	Glu	Glu	Gly	Lys	Gly	Lys	Ile	Trp
1130						1135					1140			
Trp	Asn	Leu	Arg	Lys	Thr	Cys	Tyr	Ser	Ile	Val	Glu	His	Asn	Trp
1145						1150					1155			
Phe	Glu	Thr	Phe	Ile	Val	Phe	Met	Ile	Leu	Leu	Ser	Ser	Gly	Ala
1160						1165					1170			
Leu	Ala	Phe	Glu	Asp	Ile	Tyr	Ile	Glu	Gln	Arg	Lys	Thr	Ile	Lys
1175						1180					1185			
Thr	Met	Leu	Glu	Tyr	Ala	Asp	Lys	Val	Phe	Thr	Tyr	Ile	Phe	Ile
1190						1195					1200			
Leu	Glu	Met	Leu	Leu	Lys	Trp	Val	Ala	Tyr	Gly	Phe	Gln	Thr	Tyr
1205						1210					1215			
Phe	Thr	Asn	Ala	Trp	Cys	Trp	Leu	Asp	Phe	Leu	Ile	Val	Asp	Val
1220						1225					1230			
Ser	Leu	Val	Ser	Leu	Val	Ala	Asn	Ala	Leu	Gly	Tyr	Ser	Glu	Leu
1235						1240					1245			
Gly	Ala	Ile	Lys	Ser	Leu	Arg	Thr	Leu	Arg	Ala	Leu	Arg	Pro	Leu
1250						1255					1260			
Arg	Ala	Leu	Ser	Arg	Phe	Glu	Gly	Met	Arg	Val	Val	Val	Asn	Ala
1265						1270					1275			

Leu Val Gly Ala Ile Pro Ser Ile Met Asn Val Leu Leu Val Cys
1280 1285 1290

Leu Ile Phe Trp Leu Ile Phe Ser Ile Met Gly Val Asn Leu Phe
1295 1300 1305

Ala Gly Lys Phe Tyr His Cys Val Asn Met Thr Thr Gly Asn Met
1310 1315 1320

Phe Asp Ile Ser Asp Val Asn Asn Leu Ser Asp Cys Gln Ala Leu
1325 1330 1335

Gly Lys Gln Ala Arg Trp Lys Asn Val Lys Val Asn Phe Asp Asn
1340 1345 1350

Val Gly Ala Gly Tyr Leu Ala Leu Leu Gln Val Ala Thr Phe Lys
1355 1360 1365

Gly Trp Met Asp Ile Met Tyr Ala Ala Val Asp Ser Arg Asp Val
1370 1375 1380

Lys Leu Gln Pro Val Tyr Glu Glu Asn Leu Tyr Met Tyr Leu Tyr
1385 1390 1395

Phe Val Ile Phe Ile Ile Phe Gly Ser Phe Phe Thr Leu Asn Leu
1400 1405 1410

Phe Ile Gly Val Ile Ile Asp Asn Phe Asn Gln Gln Lys Lys Lys
1415 1420 1425

Phe Gly Gly Gln Asp Ile Phe Met Thr Glu Glu Gln Lys Lys Tyr
1430 1435 1440

Tyr Asn Ala Met Lys Lys Leu Gly Ser Lys Lys Pro Gln Lys Pro
1445 1450 1455

Ile Pro Arg Pro Ala Asn Lys Phe Gln Gly Met Val Phe Asp Phe
1460 1465 1470

Val Thr Arg Gln Val Phe Asp Ile Ser Ile Met Ile Leu Ile Cys
1475 1480 1485

Leu Asn Met Val Thr Met Met Val Glu Thr Asp Asp Gln Gly Lys

1490		1495		1500
Tyr Met Thr Leu Val Leu Ser Arg Ile Asn Leu Val Phe Ile Val				
1505		1510		1515
Leu Phe Thr Gly Glu Phe Val Leu Lys Leu Val Ser Leu Arg His				
1520		1525		1530
Tyr Tyr Phe Thr Ile Gly Trp Asn Ile Phe Asp Phe Val Val Val				
1535		1540		1545
Ile Leu Ser Ile Val Gly Met Phe Leu Ala Glu Met Ile Glu Lys				
1550		1555		1560
Tyr Phe Val Ser Pro Thr Leu Phe Arg Val Ile Arg Leu Ala Arg				
1565		1570		1575
Ile Gly Arg Ile Leu Arg Leu Ile Lys Gly Ala Lys Gly Ile Arg				
1580		1585		1590
Thr Leu Leu Phe Ala Leu Met Met Ser Leu Pro Ala Leu Phe Asn				
1595		1600		1605
Ile Gly Leu Leu Leu Phe Leu Val Met Phe Ile Tyr Ala Ile Phe				
1610		1615		1620
Gly Met Ser Asn Phe Ala Tyr Val Lys Lys Glu Ala Gly Ile Asp				
1625		1630		1635
Asp Met Phe Asn Phe Glu Thr Phe Gly Asn Ser Met Ile Cys Leu				
1640		1645		1650
Phe Gln Ile Thr Thr Ser Ala Gly Trp Asp Gly Leu Leu Ala Pro				
1655		1660		1665
Ile Leu Asn Ser Ala Pro Pro Asp Cys Asp Pro Asp Thr Ile His				
1670		1675		1680
Pro Gly Ser Ser Val Lys Gly Asp Cys Gly Asn Pro Ser Val Gly				
1685		1690		1695
Ile Phe Phe Phe Val Ser Tyr Ile Ile Ile Ser Phe Leu Val Val				
1700		1705		1710

Val	Asn	Ser	Tyr	Ile	Ala	Val	Ile	Leu	Glu	Asn	Phe	Ser	Val	Ala
1715						1720					1725			
Thr	Glu	Glu	Ser	Ala	Glu	Pro	Leu	Ser	Glu	Asp	Asp	Phe	Glu	Met
1730						1735					1740			
Phe	Tyr	Glu	Val	Trp	Glu	Lys	Phe	Asp	Pro	Asp	Ala	Thr	Gln	Phe
1745						1750					1755			
Ile	Glu	Phe	Ser	Lys	Leu	Ser	Asp	Phe	Ala	Ala	Ala	Leu	Asp	Pro
1760						1765					1770			
Pro	Leu	Leu	Ile	Ala	Lys	Pro	Asn	Lys	Val	Gln	Leu	Ile	Ala	Met
1775						1780					1785			
Asp	Leu	Pro	Met	Val	Ser	Gly	Asp	Arg	Ile	His	Cys	Leu	Asp	Ile
1790						1795					1800			
Leu	Phe	Ala	Phe	Thr	Lys	Arg	Val	Leu	Gly	Glu	Ser	Gly	Glu	Met
1805						1810					1815			
Asp	Ala	Leu	Arg	Ile	Gln	Met	Glu	Asp	Arg	Phe	Met	Ala	Ser	Asn
1820						1825					1830			
Pro	Ser	Lys	Val	Ser	Tyr	Glu	Pro	Ile	Thr	Thr	Thr	Leu	Lys	Arg
1835						1840					1845			
Lys	Gln	Glu	Glu	Val	Ser	Ala	Ala	Ile	Ile	Gln	Arg	Asn	Phe	Arg
1850						1855					1860			
Cys	Tyr	Leu	Leu	Lys	Gln	Arg	Leu	Lys	Asn	Ile	Ser	Ser	Asn	Tyr
1865						1870					1875			
Asn	Lys	Glu	Ala	Ile	Lys	Gly	Arg	Ile	Asp	Leu	Pro	Ile	Lys	Gln
1880						1885					1890			
Asp	Met	Ile	Ile	Asp	Lys	Leu	Asn	Gly	Asn	Ser	Thr	Pro	Glu	Lys
1895						1900					1905			
Thr	Asp	Gly	Ser	Ser	Ser	Thr	Thr	Ser	Pro	Pro	Ser	Tyr	Asp	Ser
1910						1915					1920			

Val Thr Lys Pro Asp Lys Glu Lys Phe Glu Lys Asp Lys Pro Glu
 1925 1930 1935

Lys Glu Ser Lys Gly Lys Glu Val Arg Glu Asn Gln Lys
 1940 1945 1950

<210> 69
 <211> 1380
 <212> DNA
 <213> Homo sapiens

<400> 69
 aatgtatttta tttaattgat gataaactgt aataaaatca tagttgtttg ctctaaagta 60
 gatatgaaag gtcagatgaa acaataacat acatctggat tgagaaatat cttaataact 120
 gatggattat ttttattttc tttatgtatt gtgtgcttca atatcctaataa aaataatatt 180
 agctaggttc actgatgtat agaatctttt tctacattta gatatttctt gcaaagtgtt 240
 taccagaaag caacacaaaa atactatcag tgagtatgtg tttacactgt tctctaagga 300
 gtcaaattcc tcaccttgaa aataattcat cccaggaaga gaaaagggtt tcaaaagact 360
 agagcaggcc acaaggggagc tttcgcaaaa ctctacacgt aaagggtaat gtaaaacttaa 420
 aacctatttt tcaaacagta atttatatat cttttaattt tagtagttta tgtgtgaaac 480
 aatcatgcaa aacaacaaag tgataaaatt ttttaaaaaa attagtgaga tgcaaataac 540
 tgaatatgta aaagggtctca tacatatatta tatgtagtag ataagttaca tttttttagt 600
 gtgttgggaa attttagctc acatcacctc tctactgtca tcttggggca ctttcatgac 660
 taccatgct tcatgcaggt ttactttcct ccctgtgaca gaggataatg ggaatgtttt 720
 ttctttggct caattttgtg tgtgtccgcc agtagatggc gtaccacttt gagtgcgac 780
 ggcctttttt tctttctttt tttttttcct caaagctggt ttctgatata tgttgggtac 840
 catagagtga atctcagaac aggaagcgga ggcataagca gagaggattc tggaaaggtc 900
 tctttgtttt cttatccaca gagaaagaaa gaaaaaaaaa tgtaactaat ttgtaaacct 960
 ctgtggtcaa aaaaaaaaaa aaaaaaaaaa gctgaacagc tgcagaggaa gacacgttat 1020
 accctaacca tcttggatgc tgggctttgt tatgctgtaa ttcataaggc tctgttttat 1080
 caggtaagct gacaaaacat ttcattatct gcaccataga acctagctac caggtcattt 1140
 tccttacttt aaaatcatct tcatgctgct atttttaacc cagtgttggt taaatgtaaa 1200
 ttacaggaac caaaggcatc gtttgatgtg taaactgctt actatttctt tatctttcaa 1260

agaaaataga gcctgtcttg	aaatggtgat ttatggtaca tactaggcat caatggtctt	1320
gtgtttttgt agatgcttat	gattaattgt attcagaaaa aatatttttt attatactta	1380

<210> 70
 <211> 840
 <212> DNA
 <213> Homo sapiens

<400> 70		
agggagaac agaaggatgc	tcaggagtgc cagcatgcct tcagaaagac taaatggatc	60
aaggctgcca aagaaggggg	agcacccttg tcccaaccct aggatcctgg cagtggttcc	120
tgggtccatt cttcctaaat	catgctaggg catgctttta acaaggggtca aatatcttgc	180
tttgcatcat ccttgctttc	tcgatccagg gccataaaaa aaaaaggaat aaaaccaga	240
cacagagcca gagcaccct	atgccaaatg tcaaagatta taggctaatt tcacctgtat	300
tctctttcta cagagattat	ggagcaagaa aactgaagcc aagccacatc aaggtttgac	360
agggatgaga tacctgtcaa	ggattcatag tagagtggct tactgggaaa ggagcaaaga	420
atctcttcta gggatattgt	aagaataaat gagataattc acagaaggga cctggagctt	480
ttccggaaaa aggtgctgtg	actatctaag gtaactaaac aacttctggg tataagtttg	540
tttttggtga aaataaacta	aaatctctac tatttaacaa ggacagctgt atcaggacca	600
aaagaaggca gaggggtgtt	ttcttccttc ctctaccagt ttgttcttcc aaagaggcaa	660
atacatacag ggagacatag	cacagatgac cttagggaaat ggaatgatgc caaaggctgt	720
tgatgtaaga aagagagatt	aactcagttt tttttttgtt tttgtttttt tgttgttgtt	780
gttgttgttt tgagacagag	tctctctctg tcgcccaggc tggagtgcag tggcatgaac	840

<210> 71
 <211> 780
 <212> DNA
 <213> Homo sapiens

<400> 71		
gatatattaa attttatgta	ttttaataaaa ttataatgtg catataatca ttaataatat	60
atatattcca caccaaggca	tcagtaagaa ttaattttta aagtctgctc taatgtgaat	120
ataaaattat gtaagaactc	tgtataataa gctcacagag tacaagaaag gagaggaaaa	180
aagtaaaaga gaactgcaa	agaactatga gggatttcca aacagcaaaa ttgtcattga	240
agccatgaga aactctactc	actaaattct ttaattttctc agcctacca aatattgggc	300
aaaccctaat tctcttcgag	gggaaaagct gagagtctgg aactagccta tcttccgagg	360

acttagagac aacagtatgg gaatttcaac gagacgtttt tactttcttt tgaccaagat	420
tcaaattctt tattccagcc cttgataagt aaataagaag gtaaaggact atttatttgt	480
aaaaagtttt tcatgatttt gtgatggcac cttgttccat atcatctcag ataaatcaga	540
ataatttgtg aaaattactc ggtgatttcc acattagata ttttaaacct aatgttattt	600
ctaaaacaaa aaccaaccag gagaatccaa ttaagtaaaa tgtatgtatt aatataaatt	660
agctattccc atctggaaaa gggcagccat ttctgtgttg aggtgcctca atgatactga	720
ggctgagaca ggtagatga tacaggcata ccattagcag cagactcaat actaaccag	780

<210> 72

<211> 1025

<212> DNA

<213> Homo sapiens

<400> 72

acaaagtatt gaaaaggcgg ggggcaggat gcagaataat taagcaattt tattgacaaa	60
ctthactggc attactcttt tgctgaaagt atactatatt ttggcttaca gtgtcaaaac	120
agaatttttt aaatgctttt aaaaaatgga caaaattata gatattcttg agtttaaata	180
taatgtttat atattatata tactgtacat tgtagaatgg ctaaatcaaa ctaattaaca	240
ttaagtacag acttttgata gatttatgaa cttggcttat tgagaatgag gttgaatgat	300
gatgttttca agttcaaagtg ttagtgcag tactaaaagc atgacttaat gtttatagct	360
ttaaaaagtt actaaagaat gacatttttg ttgatgttct tatgcccaat cgcttgcttt	420
cctaactctt gtgcaatttt tctttttatt gcaggtaatt cgtatgcaag aagctacacg	480
taattaaatg tgcaggatga aaagatggca caggcactgt tggtaacccc aggacctgaa	540
agcttccgcc tttttactag agaatctctt gctgctatcg aaaaacgtgc tgcagaagag	600
aaagccaaga agcccaaaaa ggaacaagat aatgatgatg agaacaaacc aaagccaaat	660
agtgacttgg aagctggaaa gaaccttcca tttatttatg gagacattcc tccagagatg	720
gtgtcagagc ccctggagga cctggatccc tactatatca ataagaaagt gagtattgat	780
tttagacttc taataaatct ttaatgaaac tcttaactgt aatatacttt tctgggcctt	840
atatacagca tcacaatttt tcttctgtta aagattttat aatactcttc actgtcactt	900
atttttatca caatataata aaacaaacat ttataagaaa tgaagtcaag agttggttac	960
agtcaggaaa tatgaataga tgaatgattt ctacaatttc acagtgataa ttcagatagt	1020
caaaa	1025

<210> 73
<211> 433
<212> DNA
<213> Homo sapiens

<400> 73
tgtaacyata tgtaattta aacatctaac atgtttgtag ttatgatata tcaactgggt 60
taaacaaacc agtttgaaca aacaaattcy attttttaaa aaggctcctca tgtatgtaag 120
ctccttaaat aagcccatgt ctaatttagt aattttactc gtattttctg tttcagactt 180
ttatagtaat gaataaagga aaggcaattt cccgattcag tgccacctct gccttgata 240
ttttaactcc actaaaccct gttaggaaaa ttgctabsaa gattttggta cattcatatc 300
cttttaatgt gaattgccta aatgctatct ctaacagttg attttaaaga aaatgtcagt 360
tatattttca agtatctgta aaatttcttt gagattaatg gtaacattgt tagtttaatt 420
catttatttg cat 433

<210> 74
<211> 450
<212> DNA
<213> Homo sapiens

<400> 74
gagtgcacca aggccatatt acaggctttg aagtttctta ttattttatc attgttttaa 60
aacaataat attaatattca cagtttttgc atcgataaac ttttttgtgt gttttggatc 120
atttataaat ggccatggta acctactaac atttattcct taactataat ctactttatt 180
cagcatgctt atcatgtgca ctattttgac caactgtgta tttatgacct tgagcaaccc 240
tcctgactgg acaaagaatg tagagtaagt aggaataact tctgggaatg agaaatgcac 300
actcaaattc tctagcaatc tccttggtgg tatagcctga cttatgggtt ccacttctgt 360
ctaagaaaag ttattttcat aatatgcagc cggttaaggga ggtctttcgg gggagctatt 420
cttctacgag gtaagtattt tcccacaaaa 450

<210> 75
<211> 701
<212> DNA
<213> Homo sapiens

<400> 75
aaaatttacc atttgyggct ttccattaca tttctatcag ataactctgc gctagtaggt 60
caaactagat gattatccat aagatacatg aaactattat tctaaaaccc aaatagttaa 120

accagattag attcctaaag aatatatctt ctcttcagtt taactctttg ctcaggcttg	180
taaaactaac taaatgaata gattatcttg taaatagaag taaggaacaa tattttaatg	240
aattgaaaaa ccacaaaagg ataggatttg ctatgattga aaacatttat tttaacagtt	300
caagcaaaat tgttaatttt ggcttgatg tttttcctag gtacacattc actggaatct	360
atacctttga gtcacttata aaaatcttgg caagagggtt ttgcttagaa gattttacgt	420
ttcttcgtga tccatggaac tggctggatt tcagtgtcat tgtgatggcg tgagtaactt	480
tgaaaatttg ataagcgcaa aggagtgaag atagtcatac tacaaacaag gtcttttgtg	540
catatattaa atgtagagct ttcttgtagg tcaagttaac tatatgggtt gtgtattttc	600
agaatacata ttagaataca tattgcaatg taaatatatc cagtaaatga tcaataaatg	660
gggttatctt catgtcatat agtctttctc ttcacaaaa t	701

<210> 76
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 76	
atttggtaaa ctcacagggc tctatgtgcc aaaccagca ttaagtcctt atttagtata	60
aactttgcca aaactatcag taactctgat ttaattctgc aggtatgtaa cagaatttgt	120
aagcctaggc aatgtttcag cccttcgaac tttcagagtc ttgagagctc tgaaaactat	180
ttctgtaatc ccaggtgaag agaaactggg gtaaggtagt aggcccctta tatctccaac	240
ttttcttggtg tggtattgtg tttgtgtgtg aactccccta ttacag	286

<210> 77
 <211> 515
 <212> DNA
 <213> Homo sapiens

<400> 77	
gtaagaagaa actggtgtaa ggtagtaggc cccttatatc tccaactttt cttgtgtgtt	60
attgtgtttg tgtgtgaact cccctattac agatatgtga cagagtttgt ggacctgggc	120
aatgtctcag cggtgagaac attcagagtt ctccgagcac tgaaaacaat ttcagtcatt	180
ccaggtgaga gctagggtta acaccgaggt tgactttaat tattgagttt gaaatcaatt	240
tatatgactt acagcattag ccttggtgct tattattaca gttcatcccg gtaaataatg	300
ccaatgatg tttcaatgtc agtttagctc ctaaaatttt ataaattaca tgcgtattta	360

taaagtcagc ctttgagttt aacagaaaat tgcattgagac atcttcaaaa aatgctaatt	420
tgggcctctt gcgctctctc tctctctttt tcactacccat ggctttacta acagatttgg	480
attttacccat tcgctgcaga tgtagttcaa aaatg	515

<210> 78
 <211> 564
 <212> DNA
 <213> Homo sapiens

<400> 78	
aaacttcctg actagatatt taaaccttca tattgaattt ccagcaagca cactgttcat	60
gtgtaaaatc tgctgttcat ctatttccca aatcatcagg ctatccatac agctttggtg	120
tctaaatagt caagcaatca tttatggggg aaagagaatg tgtgtgacta ttaagaaatc	180
atgatttctg gcactcttcc tcaggtaacc tatagttctc tctctgcagg tttaaagacc	240
attgtggggg ccctgatcca gtcggtaaag aagctttctg atgtgatgat cctgactgtg	300
ttctgtctga gcgtgtttgc tctcattggg ctgcagctgt tcatgggcaa tctgaggaat	360
aaatgtttgc agtggccccc aagcgattct gcttttgaaa ccaacaccac ttcctacttt	420
aatggcacia tggattcaaa tgggacattt gttaatgtaa caatgagcac atttaactgg	480
aaggataaca ttggagatga cagtaagaag tattacatta tgttaacctt agtgttgctg	540
aatgaatttt caactataaa tagt	564

<210> 79
 <211> 497
 <212> DNA
 <213> Homo sapiens

<400> 79	
tgagactgtg ggtgtacagc cacctttgta aataactgaa atagtccaac tctgatttat	60
tactaatact aatgtgaata ggattaatat gaaataaaat gggttttttt ttgtattaac	120
aggtcacttt tatgttttgg atgggcaaaa agacccttta ctctgtggaa atggttcaga	180
tgcagggtaa gaaacataat atatattttt aagatataga actctttgcg aaaaaaaaaa	240
gtaggtagga aaacaactac atggttatat gtgtagcctt accatgtatg caataaagag	300
cagtgtgct cccctaggaa gtgccttgct tgccttaccg gattgccact ggtcctaaac	360
tcacagcaat taaaaattat ccctttgtga agacccttcc ccaaaatttc acagttaaga	420
tgttcttaaa ttgatgctcc aatgtgtgaa ggcccagagt ctgtctttgc tgtacatcta	480
tcagagctgt taggaaa	497

<210> 80
 <211> 501
 <212> DNA
 <213> Homo sapiens

<400> 80
 aaagagtaaa aatatggtaa ggtcagagcc aaaagtgtgt ggttgctagc tttctgccat 60
 tctaaatgtc trwaaawatt tatttgcac taaattttct atcggctcttc ctagtgaatt 120
 tcatctgata agtttcacgg tgggcaatca cctaaagtgt tctggaaatt aaagcaagat 180
 aattcgtcac agatagcagc tttgggtttt gaaaattcct ataagtcaaa taaattgaaa 240
 ttgctgtaat ttctaaactg accctacctc catttctctc tcttatagcc agtgtccaga 300
 aggatacatc tgtgtgaagg ctggtcgaaa cccaactat ggctacacaa gctttgacac 360
 ctttagctgg gctttcctgt ctctatttcg actcatgact caagactact gggaaaatct 420
 ttaccagttg gtaaggtcca aatgagcatg cataacattt atttttatag acatgtatga 480
 aatgaaaagc ataggctgag t 501

<210> 81
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 81
 agctaattag tctactgact atctaactgt ggtaatcaga tatttatttg gggacattat 60
 actaaaatac tgatggaatt atccccatt tcccctagac attacgtgct gctgggaaaa 120
 catacatgat attttttgtc ctggtcattt tcttgggctc attttatttg gtgaatttga 180
 tcctggctgt ggtggccatg gcctatgagg ggcagaatca ggccaccttg gaagaagcag 240
 aacaaaaaga ggccgaattt cagcagatgc tcgaacagct taaaaagcaa caggaagaag 300
 ctcaggtact gagtgataaa mgcaaagatt tatcattatt attmtagtt tctaagtaga 360
 aatagtgtta tactatagag ggtagattgg aactgctttt tcattttata tatmggcatt 420
 gtcattagac ac 432

<210> 82
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 82
 tgcaaactgt tttcaaagct ctgtgttcta aatagtgcct ggctttgttt tatgacaggc 60

agttgcggca gcatcagctg cttcaagaga tttcagtgga ataggtgggt taggagagct	120
gttggaaagt tcttcagaag catcaaagtt gagttccaaa agtgctaaag aatggaggaa	180
ccgaaggaag aaaagaagac agagagagca ccttgaagga aacaacaaag gagagagaga	240
cagctttccc aaatccgaat ctgaagacag cgtcaaaaaga agcagcttcc ttttctccat	300
ggatggaaac agactgacca gtgacaaaaa attctgctcc cctcatcagg tatgattttc	360
tactaagtgc tctggtttct ttgtcattgc tattgctttt tagtttttgt attttgtttt	420
ggtacacttt tgtactatct gtacttcagt tgagggacag ggaactaaca tttaatatag	480
ttgttttaa	489

<210> 83
 <211> 653
 <212> DNA
 <213> Homo sapiens

<400> 83	
gtgaagacta aatgaagtgg ttgtatactt agtaaatgac aaatcagtat tgtagtcag	60
aaaaacactc tttgtactta aatttgcttt aataaaaata tcaaaatata tgtgtcctct	120
ataaatttga ttatccatgt ttaagggcaa gagtatacta actccaaaga aaacagatcc	180
tttaatatta atatttatta aataattgag ttcttcccct acccccatcc cattcctttc	240
ctttttgctt tctctgcagt ctctcttgag tatccgtggc tccctgtttt cccaagacg	300
caatagcaaa acaagcattt tcagtttcag aggtcgggca aaggatgttg gatctgaaaa	360
tgactttgct gatgatgaac acagcacatt tgaagacagc gaaagcagga gagactcact	420
gtttgtgccg cacagacatg gagagcgacg caacagtaac gtagtcagg ccagtatgtc	480
atccaggatg gtgccagggc ttccagcaaa tggggaagat gcacagcact gtggattgca	540
atgggtgtggt ttccttggtg ggtggacctt cagctctaac gtcacctact gggcaacttc	600
cccagaggtg ataatagatg acctagctgc tactgacatt attcaccaat ttg	653

<210> 84
 <211> 566
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (477)..(477)
 <223> n = a, c, t or g

<400> 84
gaattctctt aaaggtacta cctgtgatac tttttttaaa aaaaaactgt ttataactta 60
gcaataattc aatattttat tcttgaaatt cttacctgga aaattgcatg tagcatgatt 120
tgcaaagaaa tgctatgtgg tgttgattta cttattggga agagtgggtt gagccatcag 180
tatttggttt gcagggcacc accactgaaa cggaagtcag aaagagaagg ttaagctctt 240
accagatttc aatggagatg ctggaggatt cctctggaag gcaaagagcc gtgagcatag 300
ccagcattct gaccaacaca atggaaggta agagcaggtc atggaacagc caactttctg 360
tgattatgtg ctttgtgaac tattccttct tttcatagaa ttactgaagt ctgttaccba 420
gatcgaacta tatattagac ctaagaatgt gatatatggt gtacattatc acattgntta 480
caaaactaat attggcctta ttctttttga cttgggtcct taccttactt gcagagtgat 540
atttcaacac ttgatattat atcaat 566

<210> 85
<211> 748
<212> DNA
<213> Homo sapiens

<400> 85
tagtcattttt aaaagcaaaa tattaaattc aaagtgcctta ttttctgtat tcaaaagaga 60
aaaaagtcga tctatatgac attttaatta acatttttctg aaaatattta atgggattgt 120
cttctcaagt ttcttaagta atatgaactt ctattttcaa atataagcat caattttggt 180
aaataatgta aaatctacta gcaataataa ctcatTTTTg ttgttattta ctactcttcc 240
ttgttattgt ccctccagaa cttgaagaat ctagacagaa atgtccgcca tgctggtata 300
gatttgccaa tgtgttcttg atctgggact gctgtgatgc atgggttaaaa gtaaaacatc 360
ttgtgaattt aattgttatg gatccatttg ttgatcttgc catcactatt tgcattgtct 420
taaataccct ctttatggcc atggagcact accccatgac tgagcaattc agtagtgtgt 480
tgactgtagg aaacctggta agtacatttg aagtttactt atttactttg gtagatgtgg 540
gagagataga ccaaagggaa agatgtattt gtgctgtggt gaacccaaaa attatatact 600
ctttcctcat agaaagaaat atctaaggaa tattacaggg aatctcagag atacagccta 660
aaactcaact ggtatgaatg ctgattgttt aggccaatgt ctgtgctgat tgatcatggt 720
gtcttaccag ttgtaaacgt ctcaaaat 748

<210> 86

<211> 664
<212> DNA
<213> Homo sapiens

<400> 86
ctaagacttg aattgatttg tcactattct ctcaacttaa attttagata tttttattcc 60
tgtctaattgt tcttctttat aaattcgtgt agcatcagtg ttttcagtg ctttgatagt 120
agtgtctgac tctaattttt taggtcttta ctgggatttt tacagcagaa atgggttctca 180
agatcattgc catggatcct tattactatt tccaagaagg ctggaatata tttgatggaa 240
ttattgtcag cctcagttta atggagcttg gtctgtcaaa tgtggaggga ttgtctgtac 300
tgcgatcatt cagactggta tctatttata tatatccctg tcgctcattg gcacaacatt 360
tattttgaaa ttgaatcaat gtatatttat ataattatta attttaattt taaatttaca 420
tcaatatgtg acattctaag aaaacatgta aacatccyct ttaaagctaa accattttct 480
aagaatgatg aaagcattca aaatactcta taatgattag gtatgtaggg cacattagaa 540
aacctacaag tactttctaa aactgtgttt taagtttatg aagctttttt ggccttacag 600
tctgtaaaga tacgcaaata aaaatttaga cccaggttaa ttttagcttt ttattaacct 660
tact 664

<210> 87
<211> 750
<212> DNA
<213> Homo sapiens

<400> 87
tattttttatt tttgcactta aatgatatta tgaccagatt tacaattcta atattgttaa 60
cactattttt tctggatttg aaattgaatc agttcagtat attttgagtt ttacatcta 120
ccacgtgtgg ttctatgata ccacatacta ataaaataat gtctaaaatt atattatgat 180
tactactaac agcatctttt cacttgatta cagcttagag ttttcaagtt ggcaaaatcc 240
tggcccacac taaatatgct aattaagatc attggcaatt ctgtgggggc tctaggaaac 300
ctcaccttgg tgttgccat catcgtcttc atttttgctg tggtcggcat gcagctcttt 360
ggtaagagct acaaagaatg tgtctgcaag atcaatgatg actgtacgct cccacggtgg 420
cacatgaacg acttcttcca ctcttctctg attgtgttcc gcgtgctgtg tggagagtgg 480
atagagacca tgtgggactg tatggaggtc gctggccaaa ccatgtgcct tattgttttc 540
atgttggtca tggtcattgg aaaccttgtg gtatgtatgt agtacaaatg ctcataaatt 600
agaacaagag cagacagtag ctaggaacgt ggccagatgt agtaaacata tctctggttt 660

atagtaagtg gcctagactg aaatccccct attagcactc agagaataag caagttat	720
aacttctcct gggctctggg ttccccat	750

<210> 88
 <211> 768
 <212> DNA
 <213> Homo sapiens

<400> 88	
ccttagagca ggatattagg tcctttaaa agtgtgtgac ttagacatgg catctgaaat	60
atagtaagca ttcaataaac atttgttgaa ataatttttag caaagatcta tgagttccct	120
ttttaggctg ttattttaaat gcatatttca atattaarat aggcattttt ctttttttct	180
tttaggttct gaacctcttt ctggccttat tggtgagttc atttagctca gacaaccttg	240
ctgctactga tgatgacaat gaaatgaata atctgcagat tgcagtagga agaatgcaaa	300
aggggaattga ttatgtgaaa aataagatgc gggagtgttt ccaaaaagcc ttttttagaa	360
agccaaaagt tatagaaatc catgaaggca ataagataga cagctgcatg tccaataata	420
ctggaattga aataagcaaa gagcttaatt atcttagaga tgggaatgga accaccagt	480
gtgtaggtac tggaagcagt gttgaaaaat acgtaatcga tgaaaatgat tatatgtcat	540
tcataaacia cccagcctc accgtcacag tgccaattgc tgttgagag tctgactttg	600
aaaacttaaa tactgaagag ttcagcagtg agtcagaact agaagaaagc aaggaggtaa	660
ggaatgcttt taaatttttt gttccatttc ctatgataac catgtactac agttatttac	720
tattttcatt gtgcttatat gcattatcga aaagcaatga ttgtaagt	768

<210> 89
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 89	
taattattag tacataatga tcagtaatgc taatagagtt aaatgctatc actacatttt	60
ttttcacaca atgacacagt atttcccagt tagttaaata aaagggggaa aatcacatct	120
ttgaaatggg attttgtttc cagaaattaa atgcaaccag ctcatctgaa ggaagcacag	180
ttgatgttgt tctacccga gaaggatgaac aagctgaaac tgaacccgaa gaagacctta	240
aaccggaagc ttgttttact gaaggtaaac aagctctgat gtgattaaat acaatctccc	300
cttggtcttt acggagactg aatatgcctc atttaaaaaa aaaaatttag caaacgaggt	360

gtggtggctt atgcctgtaa ccccaaaatt ttgggaggct acggtaggag gattgcttga	420
ccccaggagt ttgagaccac cctgggaaat gtagtaaggc tttgcctcta c	471

<210> 90
 <211> 623
 <212> DNA
 <213> Homo sapiens

<400> 90	
gaattctaag tagctggctg agtatataag tctgagaata attcattata caggagggat	60
gctgacgata actaggaaat gaaggagatg gttaccctat gaaatgatta cctggaagtg	120
gagtggggaa ggggcaagaa agtttatttt ttcctattta agattaaaat atatttttta	180
attaactata ttttsattttt aggatgtatt aaaaagtttc cattctgtca agtaagtaca	240
gaagaaggca aagggaagat ctggtggaat cttcgaaaaa cctgctacag tattgttgag	300
cacaactggg ttgagacttt cattgtgttc atgaccttc tcagtagtgg tgcattggta	360
agtgaaatgc atattggcaa gaatcagatt ctggtgaaat agtttattct ccaaattac	420
cagatgcaaa cactgagctt cagaatcaaa agaaaaggca tatctgtgtc ttgcagagct	480
tggcacccaa ggtttaacga tgcaaaattc agttctgaac aaatcagcac catgaaacag	540
ccagatggaa tttctcatct ggtgtttatc taacagatgt tttcctcact gagacaacca	600
tttgagaga cattctgtaa cca	623

<210> 91
 <211> 520
 <212> DNA
 <213> Homo sapiens

<400> 91	
ctagttagtc tttagatttg tctcatgttc aatgtttatg taaaatatca ataatcaaaa	60
ttattctttt gtactcacta ttatactaag caattttttc aaatatttag aagaagcaag	120
ccatttaagt aaaataaaat atttttgatt cataggcctt tgaagatata tacattgaac	180
agcgaaagac tatcaaaacc atgctagaat atgctgacaa agtctttacc tatatattca	240
ttctggaaat gcttctcaaa tgggttgctt atggatttca aacatatttc actaatgcct	300
ggtgctggct agatttcttg atcgttgatg taagtatttt aagtgatttt tataaaattg	360
tttttaaaag aggcaagttt gacatttcat atgtttctgt tattaaaact ttcactaata	420
atgacataat tatgcagtta tttaaacaaa actgtaacat atgcaacaat gaggaatatc	480
tcatgggaaa gagtagagga ggtcctaaac atgggcagtg	520

<210> 92
<211> 595
<212> DNA
<213> Homo sapiens

<400> 92
ctaactaata atttaagcac acatccatga aggatctggc attgaactca atcctgaatt 60
atcagtggta tatgcacaag ttgaaaagggt gtccatggta taaaatatct aactggagat 120
attgacacgt gttgataaat atgggcaagt attctgggtt cattgggttaa aaaaaagcaa 180
tagtatgaga tgagactggc aatataagat gacccacta tgtggaagat gaaagttgcc 240
aaggatatgtc caaattagta tttagtctgc attaaataga taccacaccc tataccttca 300
gtcaacagtt tatttcttgg tgaactaatt aatttttttt tccttttgta ggtttctttg 360
gttagcctgg tagccaatgc tcttggctac tcagaactcg gtgccatcaa atcattacgg 420
acattaagag ctttaagacc tctaagagcc ttatcccgtt ttgaaggcat gagggtaaga 480
agaatagaca ctctaattat tcatgtcaaa aattacatgt aggtaatgat ttagatagaa 540
aagggtgccca tactcttctg atatttattt caatagaaat tacagaatta gaagc 595

<210> 93
<211> 787
<212> DNA
<213> Homo sapiens

<400> 93
ccagcataca aacattttct gactccatct tactatacca ggtttttaat gatttctttt 60
catactgtag catattttgc tttccttaaa accttagctc tttagttgtg tcattgtttg 120
ttttccttca aatatgtgct agaaaaatta gaagaaacaa cttgtccacc tagattttta 180
tttaactctt ttcaagcaca tattaatact aaacaaatac attgaaggaa tggtttccat 240
tcaaaagggt tgtaagctat gttcccctcg ctgtctcttc taggtgggtg tgaatgctct 300
tgttggagca attccctcta tcatgaatgt gctgttggtc tgtctcatct tctggttgat 360
ctttagcatc atgggtgtga atttgtttgc tggcaagttc taccactgtg ttaacatgac 420
aacgggtaac atgtttgaca ttagtgatgt taacaatttg agtgactgtc aggctcttgg 480
caagcaagct cggtggaata acgtgaaagt aaactttgat aatgttggcg ctggctatct 540
tgcactgctt caagtggtaa gtggctactg tacgagtttt gaaaaagttt tcaagatgtt 600
tcaaggaaga ttatttccct gatgttcttc gtttgaatga ctaacatttg acagcatgaa 660

aaaaagttaa tgataacacc tataatatca gcttgaattg atcataaaaa agatgttaca	720
attatttttat aatgtatttt ccttagtggt aagcttttag tatgttttaa tgtgatttta	780
tattttct	787

<210> 94
 <211> 438
 <212> DNA
 <213> Homo sapiens

<400> 94	
aaaggaaaca agttccagac tttaaataca aatgtttttc tttttcaatt ttatttcaat	60
ctcttgatat gaaatttcac aatattgtac aaaaagttat ttgttataat actgtcagat	120
tttcatctgg ttaaagtgtca ttgttaggtg aaatttttat gaacaattca aatatatgtt	180
atttacaggc cacattttaa ggctggatgg atattatgta tgcagctgtt gattcacgag	240
atgtaagtat cactcaaata ttatttatag gttctagatt tcttatgggtg aatattgggtg	300
gtaattttaa cactgatata tccaaaattc tatattagaa catttaatat tgcatataaa	360
aaatgaacag tctgcttcaa tatagatgat gcttgattaa tgtgtgccta atatacaata	420
tgtagcta atgaaacg	438

<210> 95
 <211> 637
 <212> DNA
 <213> Homo sapiens

<400> 95	
gtaaggcaca atgggaaaag agaatcaaga acaatcataa aacttgcaaa ctttcatttt	60
actagatcat actagtttta aaaaattgtt tttgtagaac aatatctcag ggtaaggcaa	120
aagtagcact gtattaagta acagcactca ataaattact gatttagtgt aagtatttat	180
agtatttttc atattattta atattttcaa tatcatttag gttaaacttc agcctgtata	240
tgaagaaaat ctgtacatgt atttatactt tgtcatcttt atcatctttg ggtcattctt	300
cactctgaat ctattcattg gtgtcatcat agataacttc aaccagcaga aaaagaagat	360
aagtattctt tagcttttac ctttcttcat tctggggttc tgtctgttaa tacagccaaa	420
taaccagaat acctgtgggtc atgacagact taaatcatgt ttatattatt ttcagttgcc	480
catgtgggtta tttaagctgc agggattcca gcctctagtc agtggctcct ctcaaagttt	540
atctattgga tagctttctg acccaaaaat gtgtccactc cttcggaccc atccaacggg	600
tctccagtgc tttagcttgg cttacagagc ctttcag	637

<210> 96
 <211> 637
 <212> DNA
 <213> Homo sapiens

<400> 96
 acccttgtgc ctacttttaa acatagtata atcaaattag gatcctgtag cgatcagagt 60
 tttatgtacg taaggatttt gcataatatt aagatattca gaatttcaca taaatgggaa 120
 aagcaggata aatgtatatg taggaggata atatccactt aaaaattaga aaagattaaa 180
 ggaaagacaa atatTTTTTg tgaaagtact attggaacac agaattgtaa ccagttttat 240
 actatgtctt tactttggag gtcaagacat ctttatgaca gaggaacaga aaaaatatta 300
 caatgcaatg aagaaacttg gatccaagaa acctcagaaa cccatacctc gcccagcagt 360
 aagaattact tgtctccttt aatgttccaa agccatgcgt ccatatggtc aaattgagca 420
 atgctctgga gcagaacata ttaggtgata tcaccaatat tgagccctaa ttataaagtt 480
 catatTTTgc atcataattc acaacttctg cactcattag gagttaccac attccaaaaa 540
 aaggaggtaa tgttctttat aatttgtgag ttgaaaactt ctagctcagg gttcctaata 600
 aatacttcca aagcaagggt cactttcctg ctacca 637

<210> 97
 <211> 759
 <212> DNA
 <213> Homo sapiens

<400> 97
 tatataaacc aaatatgctt tgttttagcta tataaatttt ttttccattt tttttaacat 60
 gaagagaaaa aaagcacaca aaattgtttg gggtaatatg aggagggtgc acatccatcc 120
 cgtatgtgga agggctttat ctacaatttt actgcattat tctttatgaa atatatatag 180
 taaccttatt tctcttctct cactttctag aacaaattcc aaggaatggg ctttgatttt 240
 gtaaccagac aagtctttga tatcagcatc atgacctca tctgcctcaa catggtcacc 300
 atgatgggtg aaacggatga ccagggcaaa tacatgaccc tagttttgtc ccggatcaac 360
 ctagtgttca ttgttctgtt cactggagaa tttgtgctga agctcgtctc cctcagacac 420
 tactacttca ctataggctg gaacatcttt gactttgtgg tggtgattct ctccattgta 480
 ggtaagaaca gcttaattac caagaggat agttacagag aaacagttgc cccaggacct 540
 tctagctgat taacatggaa attaggtctg agaataataa tgcatataga tgtaaagttc 600

aacactagca tatttgaata aaaactctga aacctggggtt tattcacaaa gctaactagt	660
tagaaaccat gtttaggaata ccagatttgg gaaagagggtg aagaagacag gaaataaaca	720
ttatcaggta ctctcctaata cttaaaccacaa ggtcacagg	759

<210> 98
 <211> 3975
 <212> DNA
 <213> Homo sapiens

<400> 98	
aatctgtaat gctaatgcag ggagtggatc caaatattta ataaaggctc atattcataa	60
caagttttgtt gtgttcatag accttaaaaa agataaagcc atcatgtaaa gtgaaaagat	120
attatctgtt tagctgtgtt ctatgttttc cataggtagt tttctggctg agatgataga	180
aaagtatttt gtgtccccta ccttgttccg agtgatccgt cttgccagga ttggccgaat	240
cctacgtctg atcaaaggag caaaggggat ccgcacgctg ctctttgctt tgatgatgtc	300
ccttcctgcg ttgtttaaca tcggcctcct gctcttcctg gtcatgttta tctatgccat	360
ctttgggatg tccaactttg cctatgttaa aaaggaagct ggaattgatg acatgttcaa	420
ctttgagacc tttggcaaca gcatgatctg cttgttccaa attacaacct ctgctggatg	480
ggatggattg ctagcaccta ttcttaatag tgcaccaccc gactgtgacc ctgacacaat	540
tcaccctggc agctcagtta agggagactg tgggaaccca tctgttggga ttttcttttt	600
tgtcagttac atcatcatat ccttcctggg ggtggtgaac agttacatcg cggtcatcct	660
ggagaacttc agtgttgcta ctgaagaaag tgcagagccc ctgagtgagg atgactttga	720
gatgttctat gaggtttggg aaaagtttga tcccgatgcg acccagttta tagagttctc	780
taaactctct gatatttgcag ctgccctgga tcctcctctt ctcatagcaa aaccaacaa	840
agtccagctt attgccatgg atctgcccac ggtcagtggt gaccggatcc actgtcttga	900
tattttatatt gcctttacaa agcgtgtttt gggtgagagt ggagagatgg atgcccttcg	960
aatacagatg gaagacaggt ttatggcatc aaaccctcc aaagtctctt atgagcctat	1020
tacaaccact ttgaaacgta aacaagagga ggtgtctgcc gctatcattc agcgtaattt	1080
cagatgttat cttttaaaagc aaagggttaa aaatatatca agtaactata acaaagaggc	1140
aataaagggg aggattgact tacctataaa acaagacatg attattgaca aactgaatgg	1200
gaactccact ccagaaaaaa cagatgggag ttctctacc acctctctc cttcctatga	1260
tagtgtaaca aaaccagaca aggaaaagtt tgagaaagac aaaccagaaa aagaaagcaa	1320

aggaaaagag gtcagagaaa atcaaaagta aaaagaaaca aagaattatc tttgtgatca	1380
attgtttaca gcctatgaag gtaaagtata tgtgtcaact ggacttcaag aggaggtcca	1440
tgccaaactg actgttttaa caaatactca tagtcagtgc ctatacaaga cagtgaagtg	1500
acctctctgt cactgcaact ctgtgaagca gggatatcaac attgacaaga ggttgctgtt	1560
tttattacca gctgacactg ctgaggagaa acccaatggc tacctagact atagggatag	1620
ttgtgcaaag tgaacattgt aactacacca aacaccttta gtacagtcct tgcattccatt	1680
ctatTTTTaa cttccatata tgccatatTT ttacaaaatt tgttctagtg catttccatg	1740
gtccccaatt catagtTTat tcataatgct atgtcactat ttttgtaaatt gaggtttacg	1800
ttgaagaaac agtatacaag aaccctgtct ctcaaattgat cagacaaagg tgTTTTgcca	1860
gagagataaa atTTTTgctc aaaaccagaa aaagaattgt aatgggtaca gtttcagtta	1920
cttccattTT ctagatggct ttaattTTga aagtattTTa gtctgttatg tttgtttcta	1980
tctgaacagt tatgtgcttg taaagtctcc tctaattTTt aaaggattat ttttatgcaa	2040
agtattctgt ttcagcaagt gcaaattTTa ttctaagttt cagagctcta tatttaattt	2100
aggtcaaattg ctttccaaaa agtaattctaa taaatccatt ctagaaaaat atatctaaag	2160
tattgctTTa gaatagttgt tccactttct gctgcagtat tgctttgcca tcttctgctc	2220
tcagcaaagc tgatagtcta tgtcaattaa atacctatg ttatgtaaat agttattTTa	2280
tcctgtggtg catgtttggg caaatatata tatagcctga taaacaactt ctattaaatc	2340
aaatatgtac cacagtgtat gtgtcttttg caagcttcca acagggatgt atcctgtatc	2400
attcattaaa catagtTTaa aggctatcac taatgcatgt taatattgcc tatgctgctc	2460
tattttactc aatccattct tcacaagtct tggTTaaaga atgtcacata ttggtgatag	2520
aatgaattca acctgctctg tccattatgt caagcagaat aatttgaagc tatttacaaa	2580
cacctttact tttgcacttt taattcaaca tgagtatcat atggtatctc tctagatttc	2640
aaggaaacac actggatact gcctactgac aaaacctatt cttcatattt tgctaaaaat	2700
atgtctaaaa cttgcgcaaa tataaataat gtaaaaatat aatcaacttt atttgtcagc	2760
atTTgtaca taagaaaatt atTTtcaggt tgatgacatc acaatttatt ttactttatg	2820
ctTTtgcttt tgattTTtaa tcacaattcc aaactTTtga atccataaga tttttcaatg	2880
gataatttcc taaaataaaa gttagataat gggTTttatg gatttctttg ttataatata	2940
ttttctacca ttccaatagg agatacattg gtcaaacact caaacctaga tcattttcta	3000
ccaactatgg ttgcctcaat ataacctttt attcatagat gttttttttt attcaacttt	3060

tgtagtat	ttt acgtatgcag actagtctta tttttttaat tcctgctgca ctaaagctat	3120
tacaaatata	acatggactt tgttcttttt agccatgaac aaagtggcaa agttgtgcaa	3180
ttacctaaca	tgatataaat ttttgttttt tgcacaaacc aaaagttaa tgtaattct	3240
ttttacaaaa	ctatttactg tagtgtattg aagaactgca tgcagggaa tgctattgct	3300
aaaaagaatg	gtgagctacg tcattattga gccaaaagaa taaatttcac tttttattgc	3360
atttcactta	ttggcctctg gggttttttg tttttgtttt ttgctgttg cagtttaaaa	3420
tatatataat	taataaaaacc tgtgcttgat ctgacatttg tatacataaa agtttacatg	3480
aattttacaa	cagactagtg catgattcac caagcagtac tacagaacaa aggcaaatga	3540
aaagcagctt	tgtgcacttt tatgtgtgca aaggatcaag ttcacatggt ccaactttca	3600
ggtttgataa	taatagtagt aaccacctac aatagctttc aatttcaatt aactcccttg	3660
gctataagca	tctaaactca tcttctttca atataattga tgctatctcc taattacttg	3720
gtggctaata	aatgttacat tctttgttac ttaaatgcat tatataaact cctatgtata	3780
cataaggtat	taatgatata gttattgaga atttatatta actttttttt caagaaccct	3840
tggatttatg	tgaggtcaaa accaaactct tattctcagt ggaaaaactcc agttgtaatg	3900
catattttta	aagacaattt ggatctaaat atgtatttca taattctccc ataataaatt	3960
atataaggtg	gctaa	3975

<210> 99
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

<400>	99	
tgtgttctgc	cccagtgaga ct	22

<210> 100
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

<400>	100	
cttctgctc	tgcccaaact gaat	24

<210> 101
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 101
 ggcgatgtaa tgtaagggtgc tgtc 24

 <210> 102
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 102
 gtgccttcag ttgcaattgt tcag 24

 <210> 103
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 103
 ttaggaattt catatgcaga ataa 24

 <210> 104
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 104
 tgggccattt ttcgtcgtc 19

 <210> 105
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 105
gaaagacgca ttgcagaaga aaagg 25

<210> 106
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 106
ctattggcat gtgttggtgc taca 24

<210> 107
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 107
gtgctggttt ctcatttaac tttac 25

<210> 108
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 108
ttcccaactt aatttgatat ttagc 25

<210> 109
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 109
gcagtttggg cttttcaatg ttag 24

<210> 110
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 110
 gacacagttt caraatcccr aatg 24

 <210> 111
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 111
 ttagggctac gtttcatttg tatg 24

 <210> 112
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 112
 agcactgatg gaaaaccaaa ctat 24

 <210> 113
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 113
 agcccatgca gtaatataaa tcct 24

 <210> 114
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 114
 tccaggctga taagctatgt ctaa 24

 <210> 115
 <211> 22

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 115
 ctgtggcctg cctgagcgta tt 22

<210> 116
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 116
 ccaattctac tttttaagga aatg 24

<210> 117
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 117
 aaatacttgt gcctttgaa 19

<210> 118
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 118
 gtacatacaa tatacacaga tgc 23

<210> 119
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 119
 aggcagcaga acgacttgta ata 23

<210> 120
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 120
 atccggtttt aatttcataa ctca 24

<210> 121
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 121
 gttgagcacc cttagtgaat aata 24

<210> 122
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 122
 tcacacgctc tagactactt ctct 24

<210> 123
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 123
 tgcaaatact tcagcccttt caaa 24

<210> 124
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 124
ttccccacca gactgctctt tc 22

<210> 125
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 125
gcagcaggca ggctctca 18

<210> 126
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 126
tctcccatgt ttttaattttc aacc 24

<210> 127
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 127
ataatcttgc aaaatgaaat caca 24

<210> 128
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 128
atccgggatg acctactgg 19

<210> 129
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 129
 gataacgaga gccgtagaga ttcc 24

 <210> 130
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 130
 agccagccat gcctgaacta 20

 <210> 131
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 131
 tgtttgcttg tcatattgct caa 23

 <210> 132
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 132
 tgcactattc ccaactcaca aa 22

 <210> 133
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 133
 aagggtgtct ctgtaacaaa aatg 24

 <210> 134
 <211> 20

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 134
 gtgatggcca ggtcaacaaa 20

<210> 135
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 135
 ctgggactgt tctccatatt gggt 24

<210> 136
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 136
 tttgcagggg ccaggaag 18

<210> 137
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 137
 cattgtggga aaatagcata agc 23

<210> 138
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 138
 gcaagaacc tgaatgtag aaa 23

<210> 139
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 139
 taatgctttt aagaatcata caaa 24

<210> 140
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 140
 ccagcgtggg agttgacaat c 21

<210> 141
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 141
 cggcatgcag ctctttggta 20

<210> 142
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 142
 atgtgccatg ctggtgtatt tc 22

<210> 143
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 143
cacccatctt ctaatcacta tgc 23

<210> 144
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 144
cagcaatttg gagattattc att 23

<210> 145
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 145
gcagccactg atgatgataa 20

<210> 146
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 146
ctgccagttc ctataccact t 21

<210> 147
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 147
tacagcagaa attgggaaag at 22

<210> 148
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 148
 gtattcatac ctaccacac ctat 24

 <210> 149
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 149
 ttcttggcag gcaacttatt acc 23

 <210> 150
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 150
 taagctgcac tccaaatgaa agat 24

 <210> 151
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 151
 ggctgaatgt ttccacaact 20

 <210> 152
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 152
 gttcaactat tcggaaacac g 21

 <210> 153
 <211> 19

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 153
 aggcagagga aaacaatgg 19

<210> 154
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 154
 acaaggtggg ataattaaaa atg 23

<210> 155
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 155
 gtttctctgc cctcctattc c 21

<210> 156
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 156
 aagctacctt gaacagagac a 21

<210> 157
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 157
 aatgatgatt ctgtttatta 20

<210> 158
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 158
aatttgccat tccttttg 18

<210> 159
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 159
ttgacatcga agacgtgaat aatc 24

<210> 160
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 160
ccatctgggc tcataaactt gta 23

<210> 161
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 161
ccctttgaaa attatatcag taa 23

<210> 162
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 162
atttggtcgt ttatgcttta ttc 23

<210> 163
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 163
tccagcacta aaatgtatgg taat 24

<210> 164
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 164
atttggcaga gaaaacactc c 21

<210> 165
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 165
ttttagccat ccatttttcta tttt 24

<210> 166
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 166
tattttcccc catatcattt ga 22

<210> 167
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 167
 tttgcaagaa actagaaagt c 21

<210> 168
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 168
 ttgatgcgtg acaaaatgg 19

<210> 169
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 169
 gaccagagtg aatatgtgac tacc 24

<210> 170
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 170
 ctgggatgat cttgaatcta atc 23

<210> 171
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 171
 gcaactcagt tcatggaatt tgaa 24

<210> 172
 <211> 23

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 172
 cttgttttcg ttttaaagta gta 23

<210> 173
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 173
 caaagatcac cctggaagct cagtt 25

<210> 174
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 174
 ttcaagcgca gctgcaaact gagat 25

<210> 175
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 175
 acatcggcct cctactcttc cta 23

<210> 176
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 176
 acagatgggt tcccacagtc c 21

<210> 177
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 177
taacgcatga tttcttcact gggt 24

<210> 178
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 178
atcccaaaga tggcgtagat ga 22

<210> 179
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 179
tgagaaatag gctaaggacc tcta 24

<210> 180
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 180
cctaggggct ggattcc 17

<210> 181
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 181
aaggggtgca aacctgtgat ttt 23

<210> 182
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 182
agggccatgt ggttgccata c 21

<210> 183
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 183
cttccggttt atgttttcat ttct 24

<210> 184
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 184
tctttattag ttttgcacat ttta 24

<210> 185
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 185
caatccttcc aaggtctcct atc 23

<210> 186
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 186
 ttctcatcttt gccttcttgc tcat 24

 <210> 187
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 187
 catgtccact gcagcttgtc ca 22

 <210> 188
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 188
 tcccctttac acagagtcac agtt 24

 <210> 189
 <211> 15
 <212> DNA
 <213> Homo sapiens

 <400> 189
 gcatttgaag atata 15

 <210> 190
 <211> 15
 <212> DNA
 <213> Homo sapiens

 <400> 190
 gcatttgacg atata 15

 <210> 191
 <211> 15
 <212> DNA
 <213> Homo sapiens

 <400> 191
 atcatatcct tcctg 15

<210> 192
 <211> 15
 <212> DNA
 <213> Homo sapiens

 <400> 192
 atcatatmct tcctg 15

<210> 193
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 193
 atggggttgaa tgactttctg acat 24

<210> 194
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 194
 aggcatttcc tgtacaggga ctac 24

<210> 195
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 195
 acaggaaatg cctcttctta cttc 24

<210> 196
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 196
 tttccccaag gattctacta ctgt 24

<210> 197
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 197
 agtgcattgta actgacacaa tcac 24

<210> 198
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 198
 cttgcgttcc tgtttggtc tct 23

<210> 199
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 199
 tccgcttctt taccaggga tc 22

<210> 200
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 200
 aggcagtga ggcaacttga ctaa 24

<210> 201
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 201
cagggcaata tttataaata atgg 24

<210> 202
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 202
tttgaaaaat gtgtagctca ataa 24

<210> 203
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 203
aaggcatggg agtgcataaa ag 22

<210> 204
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 204
atgaaacata aagggaggtc aa 22

<210> 205
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 205
aatgtgagct tggctattgt ctct 24

<210> 206
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 206
 ataggctccc accagtgatt tac 23

 <210> 207
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 207
 aggccccctta tatctccaac tg 22

 <210> 208
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 208
 caacaaggct tctgcacaaa ag 22

 <210> 209
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 209
 cttggtggct tgccttgac 19

 <210> 210
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 210
 tcatgagtgt cgccatcagc 20

 <210> 211
 <211> 20

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 211
 ggaaagctga tggcgacact 20

<210> 212
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 212
 ctgagacatt gccaggtcc 20

<210> 213
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 213
 tttttaccgcg ttgctttctt ta 22

<210> 214
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 214
 tatcccttgc tctttcattt atct 24

<210> 215
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 215
 gccggtaaaa tagctgttga gtag 24

<210> 216
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 216
 gccattgcaa acatttattt cgta 24

<210> 217
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 217
 gcgtgtttgc gctaataag 18

<210> 218
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 218
 ctaagtcact tgattcacat ctaa 24

<210> 219
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 219
 acagggtggc tgaagtgttt ta 22

<210> 220
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 220
gtgggaggtg gcagggttatt 20

<210> 221
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 221
caattagcag acttgccgtt att 23

<210> 222
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 222
tctcttgagt tcggtgtttt atga 24

<210> 223
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 223
accgaactca agagaattgc tgta 24

<210> 224
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 224
aaaggaccgt atgcttggtc acta 24

<210> 225
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 225
 tatgaatgcg cattttactc ttg 24

 <210> 226
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 226
 tggagctcaa cttagatgct actg 24

 <210> 227
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 227
 ggtgctggtg ggataggagt tttt 24

 <210> 228
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 228
 tccattaaat tctggcatat tctt 24

 <210> 229
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 229
 tcagaggggt gctttcttcc acat 24

 <210> 230
 <211> 24

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 230
 cttcggctgt cattgtcctc aaag 24

<210> 231
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 231
 gcaaaggaca ttggctctga gaat 24

<210> 232
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 232
 ctgcctgcac cagtcacaac tct 23

<210> 233
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 233
 tgggctttgc tgctttcaa 19

<210> 234
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 234
 agtaactgtg acgcaggact tta 24

<210> 235
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 235
ccctgttcct ccagcagatt a 21

<210> 236
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 236
gtgatggcca ggtcaacaaa 20

<210> 237
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 237
tttgatttgg gactgttgta aac 23

<210> 238
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 238
aaggcaatta taaactcttt caag 24

<210> 239
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 239
tgggagttaa attaagttgc tcaa 24

<210> 240
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 240
acattttatg aacactccca gtta 24

<210> 241
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 241
attaacactg ttcttgcttt tat 23

<210> 242
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 242
gtgccagcgt gggagttc 18

<210> 243
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 243
gtgggggctc taggaaacct 20

<210> 244
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 244
 tttaatgaaa atgaggaaaa tggt 24

 <210> 245
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 245
 gaccaagcat ttttatttca ttc 23

 <210> 246
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 246
 agtggcagca agattgtca 19

 <210> 247
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 247
 ggccttgctt ttgagttcc 19

 <210> 248
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 248
 ggtctttgcc tatttctatg gtg 23

 <210> 249
 <211> 24

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 249
 ttaaaccgct tgaagatcta aata 24

<210> 250
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 250
 tatacaccaa aatatctcct tat 23

<210> 251
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 251
 ggggcacacc taattaattt ttat 24

<210> 252
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 252
 aaagaggata ctcaagacca cata 24

<210> 253
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 253
 cccaccaaca caaatatacc taat 24

<210> 254
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 254
 tgaagggaaa gggaaaagat tt 22

<210> 255
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 255
 tccagcctta ggcacctgat aa 22

<210> 256
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 256
 ataaagcagc aaagtcagc atac 24

<210> 257
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 257
 aaggctgaac tgtgtagaca tttt 24

<210> 258
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 258
tgacatttcc atggtacaaa gtgt 24

<210> 259
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 259
tttgttggtg gcttttcact tat 23

<210> 260
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 260
ccacctggca gtttgattg 19

<210> 261
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 261
taagcgtggt caacaactac agt 23

<210> 262
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 262
attcttgcca gcatttattg tc 22

<210> 263
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 263
 caaaacattg ccccaaaag 19

 <210> 264
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 264
 tcaaactaaa caatttcct ctaa 24

 <210> 265
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 265
 gataattaaa aactcactga tgta 24

 <210> 266
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 266
 ggaggctaaa ggaaagagta tg 22

 <210> 267
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 267
 attttatagc cagcaaagaa cac 23

 <210> 268
 <211> 20

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 268
 ctagaaattc gggctgtgaa 20

<210> 269
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 269
 ctgctttgtg acctaaggca agtt 24

<210> 270
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 270
 gtgaccatgt taaggcagat gagg 24

<210> 271
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 271
 ggaatggtct ttgattttgt aacc 24

<210> 272
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 272
 tccttaactg aataaaagca cctc 24

<210> 273
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 273
 tggaacaccc atcaaagaag atact 25

<210> 274
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 274
 gtgggagtcc tggtgacaca aac 23

<210> 275
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 275
 agcgattcat ggcacaaac 20

<210> 276
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 276
 acgtggtgga aggcgtcata 20

<210> 277
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 277
gcgacccagt ttatagagtt tgcc 24

<210> 278
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 278
cttgtttgcg tttcaacgtg gtc 23

<210> 279
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 279
caaagatcac cctggaagct cagtt 25

<210> 280
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 280
atccagggca tctgcaaaat cagaa 25

<210> 281
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 281
tgcctatggt aagagggaag ttggg 25

<210> 282
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 282
 atgaccgcga tgtacatgtt cag 23

 <210> 283
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 283
 tcaattgttt acagcccgtg atg 23

 <210> 284
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 284
 tttatacaaaa ggcagacaac at 22

 <210> 285
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 285
 aggcgtaatg gctactcaga cga 23

 <210> 286
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 286
 gtaatccctc tccccgaaca taaac 25

 <210> 287
 <211> 26

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 287
 tttgattcac gggttgttta ctctta 26

<210> 288
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 288
 ttctatggaa catttacagg cacatt 26

<210> 289
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 289
 taatgtgcct gtaaattgttc cataga 26

<210> 290
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 290
 caggcttctt agaaaggact gatagg 26

<210> 291
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 291
 gtcccagcag catgactatc 20

<210> 292
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 292
 cccactgggt aaaattacta ac 22

<210> 293
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 293
 tagccatctt ctgctcttgg t 21

<210> 294
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 294
 tggcttccca tattagactt ctg 23

<210> 295
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 295
 tcttgccat gctgctgtat ctta 24

<210> 296
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 296
agtcgggctt ttcattcattg ag 22

<210> 297
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 297
ttcttcatgt cattaagcaa tagg 24

<210> 298
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 298
ttcaatttaa aagtgctagg aaca 24

<210> 299
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 299
cttcaggtgg atgtcacagt cacta 25

<210> 300
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 300
attcaagcaa tgccaagagt atca 24

<210> 301
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 301
 ctttcaatag taatgcctta tcat 24

 <210> 302
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 302
 tcctgcatgc atttcaccaa c 21

 <210> 303
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 303
 ctgttcacat tttgtaaaac taat 24

 <210> 304
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 304
 atcccaaaga tggcgtagat ga 22

 <210> 305
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 305
 cacgctgctc tttgctttga 20

 <210> 306
 <211> 23

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 306
 gatctttgtc agggtcacag tct 23

 <210> 307
 <211> 9
 <212> DNA
 <213> Homo sapiens

 <400> 307
 taaaaagaa 9

 <210> 308
 <211> 9
 <212> DNA
 <213> Homo sapiens

 <400> 308
 tacagagaa 9

 <210> 309
 <211> 9
 <212> DNA
 <213> Homo sapiens

 <400> 309
 tacagagaa 9

 <210> 310
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 310
 tgtgtccgcc agtagatgg 19

 <210> 311
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 311
tttttgacca cagaggttta caa 23

<210> 312
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 312
gaagcggagg cataagcaga 20

<210> 313
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 313
ggtgcagata atgaaatggt ttgt 24

<210> 314
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 314
cacccctatg ccaaattgtca aaga 24

<210> 315
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 315
caaaaacaaa cttataccca gaag 24

<210> 316
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 316
 caaatattgg gcaaacccta at 22

 <210> 317
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 317
 aaggtgccat cacaaaatca t 21

 <210> 318
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 318
 atcgcttgct ttcctaactc ttgt 24

 <210> 319
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 319
 aagtcactat ttggctttgg ttg 23

 <210> 320
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 320
 agaagcccaa aaaggaacaa gata 24

 <210> 321
 <211> 24

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 321
 ggcccagaaa agtatattac agtt 24

<210> 322
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 322
 tccttaaata agcccatgtc taat 24

<210> 323
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 323
 tctcaaagaa attttacaga tact 24

<210> 324
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 324
 aatggccatg gtaacctact aaca 24

<210> 325
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 325
 caggctatac ccacaaggag att 23

<210> 326
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 326
tgттаатттт ggcttggatg tt 22

<210> 327
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 327
tcactccttt gcgcttatca a 21

<210> 328
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 328
agggtcttat gtgccaaacc 20

<210> 329
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 329
aggggcctac taccttacac cag 23

<210> 330
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 330
tgtaatccca ggtaagaaga aac 23

<210> 331
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 331
taccgggatg aactgtaata ataa 24

<210> 332
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 332
ttctggcact cttcctcagg taac 24

<210> 333
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 333
gtcccatttg aatccattgt gc 22

<210> 334
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 334
ggcccccaag cgattctg 18

<210> 335
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 335
 tgtacaccca cagtctcaac tatt 24

 <210> 336
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 336
 acagccacct ttgtaaataa 20

 <210> 337
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 337
 tttttcgcaa agagttctat 20

 <210> 338
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 338
 aaactgaccc tacctccatt tctc 24

 <210> 339
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 339
 actcagccta tgcttttcat ttca 24

 <210> 340
 <211> 24

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 340
 cagatatttta tttggggaca ttat 24

<210> 341
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 341
 aaatctttgc ktttatcact cagt 24

<210> 342
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 342
 tagtgcctgg ctttgtttta tgac 24

<210> 343
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 343
 cggatttggg aaagctgtct ct 22

<210> 344
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 344
 agagcacctt gaaggaaaca acaa 24

<210> 345
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 345
 tccctcaact gaagtacaga tagt 24

<210> 346
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 346
 ataattgcgt tcttccccta ccc 23

<210> 347
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 347
 aagccctggc accatcctg 19

<210> 348
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 348
 tttgcaaaga aatgctatgt 20

<210> 349
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 349
ctgggtaaca gacttcagta at 22

<210> 350
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 350
atgggattgt cttctcaagt ttct 24

<210> 351
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 351
gatggcaaga tcaacaaatg ga 22

<210> 352
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 352
cttgatctgg gactgctgtg atg 23

<210> 353
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 353
aggatataat ttttggttca aca 23

<210> 354
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 354
 ttttcagtgc tcttgatagt agtg 24

 <210> 355
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 355
 gtgccaatga gcgacagg 18

 <210> 356
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 356
 ccacgtgtgg ttctatgata cc 22

 <210> 357
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 357
 accgtgggag cgtacagtca 20

 <210> 358
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 358
 cggcatgcag ctcttttgta 20

 <210> 359
 <211> 23

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 359
 tggccacgtt cctagctact gtc 23

<210> 360
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 360
 gagttccctt tttaggctgt tatt 24

<210> 361
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 361
 tcttattgcc ttcattgatt tcta 24

<210> 362
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 362
 tgaaaaataa gatgcgggag tg 22

<210> 363
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 363
 gtgaggctgg gggtgtttat g 21

<210> 364
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 364
gagatgggaa tggaaccacc a 21

<210> 365
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 365
ttcgataatg catataagca caa 23

<210> 366
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 366
aagggggaaa atcacatctt t 21

<210> 367
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 367
ttaaatgagg catattcagt ctcc 24

<210> 368
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 368
ggaagtggag tggggaagg 19

<210> 369
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 369
attcttgcca atatgcattt cact 24

<210> 370
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 370
ttcttttgta ctcactatta tactaa 26

<210> 371
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 371
aaacttgccct cttttaaaaa caat 24

<210> 372
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 372
taccacaccc tataccttca gtca 24

<210> 373
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 373
 gagtatggca cccttttcta tcta 24

 <210> 374
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 374
 gctatgttcc cctcgctgtc t 21

 <210> 375
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 375
 tgcttgccaa gagcctgac 19

 <210> 376
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 376
 gctggcaagt tctaccactg tg 22

 <210> 377
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 377
 caaacgaaga acatcaggga aata 24

 <210> 378
 <211> 24

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 378
 ttcacaatat tgtacaaaaa gtta 24

<210> 379
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 379
 attaccacca atattcacca taag 24

<210> 380
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 380
 tcagggtaag gcaaaagtag cac 23

<210> 381
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 381
 gaaccccaga atgaagaaag gtaa 24

<210> 382
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 382
 tttgtgaaag tactattgga acac 24

<210> 383
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 383
acgcatggct ttggaacat 19

<210> 384
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 384
cccgtatgtg gaagggttt at 22

<210> 385
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 385
ctaggttgat ccgggacaaa acta 24

<210> 386
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 386
aacgatgac cagggcaa at 22

<210> 387
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 387
ctagaaggtc ctggggcaac tg 22

<210> 388
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 388
aagccatcat gtaaagtga aag 23

<210> 389
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 389
atcccaaaga tggcatagat a 21

<210> 390
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 390
cacgctgctc ttgctttga 20

<210> 391
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 391
tgagctgcca gggatgaattg 20

<210> 392
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 392
 ttgctagcac ctattcttaa tagtgc 26

 <210> 393
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 393
 ccagggcagc tgcaaaatca gag 23

 <210> 394
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 394
 cccgatgcga cccagttta 19

 <210> 395
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 395
 tggaggggtt tgatgccata 20

 <210> 396
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 396
 gatggatgcc cttcgaatac aga 23

 <210> 397
 <211> 24

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 397
 ttcccattha gtttgtcaat aatc 24

<210> 398
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 398
 aaggggagga ttgacttacc tat 23

<210> 399
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic oligonucleotide

 <400> 399
 ttggcatgga cctcctcttg a 21

<210> 400
 <211> 18
 <212> DNA
 <213> Homo sapiens

 <400> 400
 caagataatg atgatgag 18

<210> 401
 <211> 15
 <212> DNA
 <213> Homo sapiens

 <400> 401
 caagatgatg atgag 15

<210> 402
 <211> 13
 <212> DNA
 <213> Homo sapiens

<400> 402
tggtgtaagg tag 13

<210> 403
<211> 13
<212> DNA
<213> Homo sapiens

<400> 403
tggtataagg tag 13

<210> 404
<211> 17
<212> DNA
<213> Homo sapiens

<400> 404
ccccttatat ctccaac 17

<210> 405
<211> 17
<212> DNA
<213> Homo sapiens

<400> 405
ccccttatay ctccaac 17

<210> 406
<211> 15
<212> DNA
<213> Homo sapiens

<400> 406
aaatacgtaa tcgat 15

<210> 407
<211> 15
<212> DNA
<213> Homo sapiens

<400> 407
aaatacataa tcgat 15

<210> 408
<211> 15
<212> DNA
<213> Homo sapiens

<400> 408
aaatacrtaa tcgat 15